Simple Poverty Scorecard® Poverty-Assessment Tool Cameroon

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Abstract

The Simple Poverty Scorecard®-brand poverty-assessment tool uses 10 low-cost indicators from Cameroon's 2014 Household Survey to estimate the likelihood that a household has consumption below a given poverty line. Field workers can collect responses in about ten minutes. The scorecard's accuracy is reported for a range of poverty lines. The scorecard is a practical way for pro-poor programs in Cameroon to measure poverty rates, to track changes in poverty rates over time, and to segment clients for differentiated treatment.

Version note

This paper uses 2014 data, replacing Schreiner (2013a), which uses 2007 data. The new 2014 scorecard here should be used from now on. The poverty lines supported for the old 2007 scorecard are also supported for the new 2014 scorecard, so existing users can measure change over time for those lines with a baseline from the old 2007 scorecard and a follow-up from the new 2014 scorecard.

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Simple Poverty Scorecard® Poverty-Assessment Tool

			Name	Identifier
Interview ID:				
Interview date:		Participant:		
Country:	CMR	Field agent:		
Scorecard:	002	Service point:		
Sampling wgt.:		Number of household members:		

Indicator	Response	Points	Score
1. How many members does the household have?	A. Eight or more	0	
	B. Seven	6	
	C. Six	8	
	D. Five	11	
	E. Four	16	
	F. Three	19	
	G. Two	24	
	H. One	34	
2. Does the (oldest) female head/spouse know how to read and write a simple sentence in French or English?	A. No	0	
	B. Only English	1	
	C. No female head/spouse	3	
	D. Only French, or French and English	6	
3. What is the main material of the floor of the residence?	A. Dirt	0	
	B. Cement, wood, or other	5	
	C. Tile/marble	9	
4. What type of toilet arrangement does the household use?	A. None/bush/field, bucket, latrine over water, composting toilet, or other	0	
	B. Pit latrine without a slab/open pit	4	
	C. Pit latrine with a slab, improved ventilated pit latrine, or flush toilet (with or without a water tank)	6	
5. What is the main type of fuel used by the household for cooking?	A. Collected or gifted firewood	0	
	B. Kerosene	2	
	C. Purchased firewood	3	
	D. Charcoal, electricity, sawdust/wood chips, does not cook, or other	8	
	E. Gas (butane or propane)	16	
6. Does the household have an electric iron?	A. No	0	
	B. Yes	6	
7. Does the household have a television set?	A. No	0	
	B. Yes	4	
8. Does the household have a radio or a hi-fi stereo system?	A. No	0	
	B. Only radio	3	
	C. Hi-fi stereo (regardless of radio)	7	
9. Does the household currently possess any cupboards, chests of drawers, or wardrobes?	A. No	0	
	B. Yes	3	
10. How many mobile phones does the household have?	A. None	0	
	B. One	4	
	C. Two	6	
	D. Three or more	9	

Score:

Back-page Worksheet: Household Membership

In the scorecard header, write the interview's unique identifier (if known), the interview date, and the sampling weight of the participant (if known). Then record the names and the unique identification numbers of the participant (who may differ from the respondent), of yourself as the field agent, and of the service point that the participant uses.

Read to the respondent: *Please tell me the first names (or nicknames) of the members of your household. A* household *is a socio-economic unit of one or more people—regardless of blood or marital relationship—who have lived (or plan to live) together for at least six months in the same compound, who share resources to provide for their basic needs, who usually eat together, and who recognize the same head.*

For your own future use, make a note of who is (oldest) female head/spouse (if she exists).

Count the number of household members, and write it in the scorecard header by "Number of household members:". Then mark the response to the first scorecard indicator.

Always keep in mind the full definitions in the "Guidelines for the Interpretation of Scorecard Indicators" for *household* and *household member*.

First name or nickname
1.
2.
3.
4.
5.
6.
7.
8.
9.
10.
12.
13.
14.
Number of household members:

Look-up table to convert scores to poverty likelihoods: National poverty lines

	Poverty likelihood (%)		
	National lines		
Score	**100%**	**150%**	**200%**
0–4	95.4	99.1	100.0
5–9	93.4	96.1	99.8
10–14	88.4	96.1	99.1
15–19	75.3	93.0	98.9
20–24	64.8	88.2	95.7
25–29	51.3	77.1	92.6
30–34	36.9	66.3	85.5
35–39	21.7	54.3	72.8
40–44	14.2	39.3	66.2
45–49	5.8	24.1	57.0
50–54	4.0	20.0	43.9
55–59	1.3	11.5	27.5
60–64	0.5	6.1	20.0
65–69	0.4	6.1	16.1
70–74	0.0	4.0	11.2
75–79	0.0	0.4	4.3
80–84	0.0	0.0	1.0
85–89	0.0	0.0	0.0
90–94	0.0	0.0	0.0
95–100	0.0	0.0	0.0

Look-up table to convert scores to poverty likelihoods: International 2005 and 2011 PPP poverty lines

	Poverty likelihood (%)					
	Intl. 2005 PPP lines				Intl. 2011 PPP lines	
Score	**$1.25**	**$2.00**	**$2.50**	**$5.00**	**$1.90**	**$3.10**
0–4	90.1	97.0	99.1	100.0	90.1	97.0
5–9	78.1	94.6	97.1	100.0	78.1	94.6
10–14	73.6	90.8	95.7	100.0	73.6	91.2
15–19	54.3	84.4	91.9	100.0	53.8	85.2
20–24	37.7	77.0	86.9	99.9	37.7	77.6
25–29	23.5	59.2	75.2	98.2	23.3	60.0
30–34	14.8	43.5	61.1	96.4	14.6	44.5
35–39	6.4	27.2	46.5	88.8	6.4	27.8
40–44	1.4	17.7	31.8	85.7	1.4	18.5
45–49	0.7	7.6	18.5	74.8	0.7	7.9
50–54	0.4	5.0	13.1	65.9	0.4	5.3
55–59	0.1	2.0	6.5	49.9	0.1	2.0
60–64	0.0	1.0	3.2	40.7	0.0	1.0
65–69	0.0	1.0	3.2	34.5	0.0	1.0
70–74	0.0	0.5	1.7	26.9	0.0	0.5
75–79	0.0	0.0	0.0	15.5	0.0	0.0
80–84	0.0	0.0	0.0	2.5	0.0	0.0
85–89	0.0	0.0	0.0	0.8	0.0	0.0
90–94	0.0	0.0	0.0	0.0	0.0	0.0
95–100	0.0	0.0	0.0	0.0	0.0	0.0

Look-up table to convert scores to poverty likelihoods: Relative and percentile-based poverty lines

	Poverty likelihood (%)					
	Poorest half of people	Percentile-based lines				
Score	below 100% Natl. line	20th	40th	50th	60th	80th
0–4	81.0	82.6	97.0	99.1	99.7	100.0
5–9	70.5	73.1	94.6	96.8	99.4	100.0
10–14	60.9	62.8	89.4	95.0	98.2	100.0
15–19	41.7	45.4	80.4	90.3	94.8	100.0
20–24	27.2	29.3	73.4	84.4	90.6	99.1
25–29	15.3	16.9	54.7	69.1	83.3	97.2
30–34	7.5	9.5	38.6	57.8	72.8	95.7
35–39	4.0	4.0	23.0	38.2	60.1	86.4
40–44	0.7	0.7	14.0	26.7	48.2	82.3
45–49	0.6	0.6	6.1	14.6	28.9	71.7
50–54	0.3	0.3	3.3	9.4	20.4	60.0
55–59	0.1	0.1	0.8	5.2	12.3	42.7
60–64	0.0	0.0	0.4	2.2	7.9	35.2
65–69	0.0	0.0	0.4	2.2	7.6	30.5
70–74	0.0	0.0	0.0	1.3	2.8	19.7
75–79	0.0	0.0	0.0	0.0	0.3	9.6
80–84	0.0	0.0	0.0	0.0	0.0	1.6
85–89	0.0	0.0	0.0	0.0	0.0	0.0
90–94	0.0	0.0	0.0	0.0	0.0	0.0
95–100	0.0	0.0	0.0	0.0	0.0	0.0

Simple Poverty Scorecard® Poverty-Assessment Tool Cameroon

1. Introduction

Pro-poor programs in Cameroon can use the Simple Poverty Scorecard poverty-assessment tool to estimate the likelihood that a household has consumption below a given poverty line, to estimate a population's poverty rate at a point in time, to track changes in a population's poverty rate over time, and to segment participants for differentiated treatment.

The new scorecard here uses data from Cameroon's 2014 Household Survey (*Enquête Camerounaise Auprès des Ménages*, ECAM). It replaces the old scorecard in Schreiner (2013a) that uses data from the 2007 ECAM. Only the new 2014 scorecard should be used from now on, as it is more accurate. The poverty lines that are supported for the old 2007 scorecard are also supported for the new 2014 scorecard, so legacy users of the old 2007 scorecard can measure change over time for those lines with a baseline from the old 2007 scorecard and a follow-up from the new 2014 scorecard.

The direct approach to poverty measurement via consumption surveys is difficult and costly. The 2014 ECAM (conducted by Cameroon's *Institut National de la Statistique*, INS) is a case in point. It runs 139 pages and includes about 750 questions,

many of which have many sub-questions or which may be asked multiple times (for example, for each household member, each crop, or each consumption item). An enumerator covered five to seven households in an 18-day stretch, visiting each household six times (INS, 2013, p. 41).

In comparison, the indirect approach of the scorecard is quick and low-cost. It uses 10 verifiable indicators drawn from the 2014 ECAM (such as "What is the main material of the floor of the residence?" and "Does the household currently possess any cupboards, chests of drawers, or wardrobes?") to get a score that is correlated with poverty status as measured by the exhaustive ECAM survey.

The scorecard differs from "proxy-means tests" (Coady, Grosh, and Hoddinott, 2004) in that it is transparent, it is freely available,[1] and it is tailored to the capabilities and purposes not of national governments but rather of local, pro-poor organizations. The feasible poverty-measurement options for local organizations are typically blunt (such as rules based on land ownership or housing quality) or subjective and relative (such as participatory wealth ranking facilitated by skilled field workers). Poverty measures from these approaches may be costly, their accuracy is unknown, and they are not comparable across places, organizations, nor time.

The scorecard can be used to measure the share of a program's participants who are below a given poverty line (for example, Cameroon's national line). USAID

[1] The Simple Poverty Scorecard tool is not, however, in the public domain. Copyright is held by Microfinance Risk Management, L.L.C. and by the sponsor.

microenterprise partners in Cameroon can use scoring with the $1.90/day 2011 PPP poverty line to report how many of their participants are "very poor".[2] Scoring can also be used to measure net movement across a poverty line over time. In all these applications, the scorecard provides a consumption-based, objective tool with known accuracy. While consumption surveys are costly even for governments, some local pro-poor organizations may be able to implement a low-cost scorecard to help with monitoring poverty and (if desired) segmenting clients for differentiated treatment.

The statistical approach here aims to be understood by non-specialists. After all, if managers are to adopt the scorecard on their own and apply it to inform their decisions, then they must first trust that it works. Transparency and simplicity build trust. Getting "buy-in" matters; proxy-means tests and regressions on the "determinants of poverty" have been around for decades, but they are rarely used to inform decisions by local, pro-poor organizations. This is not because they do not work, but because they are often presented (when they are presented at all) as tables of regression coefficients incomprehensible to non-specialists (with cryptic indicator names such as "`LGHHSZ_2`" and with points with negative values and many decimal places). Thanks to the predictive-modeling phenomenon known as the "flat maximum", simple, transparent approaches are usually about as accurate as complex, opaque ones (Schreiner, 2012a; Caire and Schreiner, 2012).

[2] USAID defines a household as *very poor* if its daily per-capita consumption is less than the highest of the $1.90/day 2011 PPP line (XAF473, Table 1) or the line (XAF420) that marks the poorest half of people below 100% of the national line.

Beyond its low cost and transparency, the technical approach of the scorecard is innovative in how it associates scores with poverty likelihoods, in the extent of its accuracy tests, and in how it derives formulas for standard errors. Although the accuracy tests are simple and commonplace in statistical practice and in the for-profit field of credit-risk scoring, they have rarely been applied to poverty-assessment tools.

The scorecard is based on data from the 2014 ECAM by Cameroon's INS. Indicators are selected to be:

- Inexpensive to collect, easy to answer quickly, and simple to verify
- Strongly correlated with poverty
- Liable to change over time as poverty status changes
- Applicable in all regions in Cameroon

All points in the scorecard are non-negative integers, and total scores range from 0 (most likely below a poverty line) to 100 (least likely below a poverty line). Non-specialists can collect data and tally scores on paper in the field in about ten minutes.

The scorecard can be used to estimate three basic quantities. First, it can estimate a particular household's *poverty likelihood*, that is, the probability that the household has per-adult-equivalent or per-capita consumption below a given poverty line.

Second, the scorecard can estimate the poverty rate of a population of households at a point in time. This estimate is the average of poverty likelihoods among a representative sample of households from the population.

Third, the scorecard can estimate the annual rate of change in the poverty rate. With two independent samples from the same population, this is the difference in the

average poverty likelihood in the baseline sample versus the average likelihood in the follow-up sample, divided by the difference (in years) between the average interview date in the baseline sample and the average interview date in the follow-up sample.

With one sample in which each household is scored twice, the estimate is the sum of the changes in each household's poverty likelihood from baseline to follow-up, divided by the sum of years between each household's pair of interviews (Schreiner, 2014a).

The scorecard can also be used to segment participants for differentiated treatment. To help managers choose appropriate targeting cut-offs for their purposes, several measures of targeting accuracy are reported for a range of possible cut-offs.

This paper presents a single scorecard whose indicators and points are derived with Cameroon's national poverty line applied to data from the 2014 ECAM. Scores from this one scorecard are calibrated with this same data to poverty likelihoods for 15 poverty lines. In particular, it is calibrated to all six of the absolute lines supported by the old 2007 scorecard (Schreiner, 2013a).[3] Thus, legacy users can switch to the new 2014 scorecard here and measure change over time by combining existing estimates from the old 2007 scorecard with estimates from the new 2014 scorecard.

The new 2014 scorecard is constructed using data from half of the households in the 2014 ECAM. Data from that same half of households is also used to calibrate scores

[3] According to INS (2013), the 2014 ECAM is designed to produce poverty-rate estimates that are comparable with those of the 2007 ECAM.

to poverty likelihoods for 15 poverty lines. Data from the other half of households is used to validate the scorecard's accuracy for estimating households' poverty likelihoods, for estimating populations' poverty rates at a point in time, and for segmenting participants. Furthermore, the accuracy of estimates of changes in poverty rates over time is tested using the validation sample from the 2014 ECAM (baseline) and all the data from the 2007 ECAM (follow-up).

Given their assumptions, all three scoring-based estimators (a household's poverty likelihood, a population's poverty rate at a point in time, and a population's annual rate of change in its poverty rate) are *unbiased*. That is, they match the observed value on average in repeated samples when constructed from (and applied to) a single, unchanging population in which the relationship between scorecard indicators and poverty is unchanging. Like all predictive models, the scorecard is constructed from a single sample and so misses the mark to some unknown extent when applied (as in this paper) to a validation sample. Furthermore, it makes errors when applied (in practice) to a different population or when applied before or after 2014 (because the relationships between indicators and poverty change over time).[4]

Thus, while the indirect scoring approach is less costly than the direct survey approach, it makes errors when applied in practice. (Estimates from the direct survey approach are taken as correct, ignoring sampling variation.) There are errors because

[4] Important cases include nationally representative samples at a later point in time or sub-national populations that are not nationally representative (Diamond *et al.*, 2016; Tarozzi and Deaton, 2007).

scoring necessarily assumes that future relationships between indicators and poverty in all populations will be the same as in the construction data. Of course, this assumption—inevitable in predictive modeling—holds only partly.

On average across 1,000 bootstraps of $n = 16{,}384$ from the 2014 validation sample, the average error (difference between the scorecard's estimate of a poverty rate versus the rate in the ECAM) at a point in time for 100% of the national poverty line is –1.1 percentage points. Across all 15 poverty lines, the average absolute error is about 1.1 percentage points, and the maximum average absolute error is 2.0 percentage points. These estimation errors are due to sampling variation, not bias; the average difference would be zero if the whole 2014 ECAM were to be repeatedly re-fielded and divided into sub-samples before repeating the entire process of constructing and validating scorecards.

With $n = 16{,}384$, the 90-percent confidence intervals are ± 0.5 percentage points or less. For $n = 1{,}024$, the 90-percent intervals are ± 1.9 percentage points or less.

To check the accuracy of estimates of changes in poverty rates over time, the new 2014 scorecard is applied to data from the 2014 validation sample (as a baseline) and to all the data from the 2007 ECAM (as a follow-up).

Across 1,000 bootstraps with $n = 16{,}384$, the average absolute error across the nine absolute poverty lines is about 2.5 percentage points. For comparison, the average absolute observed change is about 8.5 percentage points. Thus, the average absolute error is about one-third of the observed change.

The largest error is for 100% of the national line. The change from 2014 to 2007 in the ECAM at the household level in the validation samples is 29.1 – 26.7 = +2.4 percentage points, while the scorecard estimates a change of +7.9 percentage points. The resulting error of +5.5 percentage points is more than two times the value in the ECAM.

In terms of precision, the 90-percent confidence interval (with $n = 1{,}024$) of the estimated change includes the observed value for six of nine lines. The estimated direction of change matches the observed direction and is "statistically significant" (the confidence interval of the estimate does not include zero) for all nine lines.

Whether this accuracy is adequate depends on the specific purpose and context. Sometimes some number is better than no number, and sometimes just knowing the direction of change is useful, but sometimes it is not. The pattern of errors for estimates of change (positive for lower poverty lines, and negative for higher poverty lines) suggests that material conditions have improved more than consumption for lower-consumption households, while consumption has improved more than material conditions for higher-consumption households (for whom material conditions may have less room for improvement).

Section 2 below documents data and poverty lines. Sections 3 and 4 describe scorecard construction and offer guidelines for implementation. Sections 5 and 6 tell how to estimate households' poverty likelihoods and populations' poverty rates at a

point in time. Section 7 discusses estimating changes in poverty rates over time. Section 8 covers targeting. Section 9 places the scorecard here in the context of related exercises for Cameroon. The last section is a summary.

The "Guidelines for the Interpretation of Scorecard Indicators" (found after the "References") tells how to ask questions—and how to interpret responses—so as to mimic practice in Cameroon's 2014 ECAM as closely as possible. These "Guidelines" (and the "Back-page Worksheet") are integral parts of the Simple Poverty Scorecard tool.

2. Data and poverty lines

This section presents the data used to construct and validate the scorecard. It also documents the 15 poverty lines to which scores are calibrated.

2.1 Data

Indicators and points for the scorecard are selected (*constructed*) based on data from a random half of the 10,303 households interviewed in the 2014 ECAM, Cameroon's most-recent national consumption survey.

The data from the half of households from the 2014 ECAM that is used to construct the scorecard is also used to associate (*calibrate*) scores to poverty likelihoods for all poverty lines.

Data from the other half of households in the 2014 ECAM is used to test (*validate*) scorecard accuracy for point-in-time estimates of poverty rates *out-of-sample*, that is, with data that is not used in construction/calibration. This 2014 validation sample is also used—along with data from all 11,391 households in the 2007 ECAM—to test scorecard accuracy for estimates of changes in poverty rates between 2014 and 2007. This test is *out-of-sample* and *out-of-time* because it uses data not used in construction/calibration that also comes from a different time period than that used in construction/calibration.

Field work for the 2014 ECAM ran from 1 October 2014 to 24 December 2014. Consumption is in units of XAF per adult equivalent or per person per day in prices in Yaoundé on average during field work (the fourth quarter of 2014).

2.2 Poverty rates at the household, person, or participant level

A *poverty rate* is the share of units in households in which total household consumption (divided by the number of adult equivalents or by the number of household members) is below a given poverty line. The unit of analysis is either the household itself or a person in the household.[5] By assumption, each member of a given household has the same poverty status (or estimated poverty likelihood) as the other members in that household.

To illustrate, suppose that a program serves two households. The first household is poor (its per-adult-equivalent or per-capita consumption is less than a given poverty line), and it has three members, one of whom is a program participant. The second household is non-poor and has four members, two of whom are program participants.

Poverty rates are in terms of either households or people. If the program defines its *participants* as households, then the household level is relevant. The estimated household-level poverty rate is the weighted[6] average of poverty statuses (or estimated

[5] Even though consumption is sometimes measured in per-adult-equivalent units, the unit of analysis for estimates of poverty rates is always households or people.
[6] The examples here assume simple random sampling at the household level. This means that each household has the same weight, taken here to be one (1).

poverty likelihoods) across households with participants. This is

$\frac{1 \cdot 1 + 1 \cdot 0}{1 + 1} = \frac{1}{2} = 0.5 = 50$ percent. In the "$1 \cdot 1$" term in the numerator, the first "1" is the first household's weight, and the second "1" represents the first household's poverty status (poor) or its estimated poverty likelihood. In the "$1 \cdot 0$" term in the numerator, the "1" is the second household's weight, and the "0" represents the second household's poverty status (non-poor) or its estimated poverty likelihood. The "$1 + 1$" in the denominator is the sum of the weights of the two households. Household-level weights are used because the unit of analysis is the household.

Alternatively, a person-level rate is relevant if a program defines all people in households that benefit from its services as *participants*. In the example here, the person-level rate is the household-size-weighted[7] average of poverty statuses (or estimated poverty likelihoods) for households with participants, or

$\frac{3 \cdot 1 + 4 \cdot 0}{3 + 4} = \frac{3}{7} = 0.43 = 43$ percent. In the "$3 \cdot 1$" term in the numerator, the "3" is the first household's weight because it has three members, and the "1" represents its poverty status (poor) or its estimated poverty likelihood. In the "$4 \cdot 0$" term in the numerator, the "4" is the second household's weight because it has four members, and the zero represents its poverty status (non-poor) or its estimated poverty likelihood. The "$3 + 4$" in the denominator is the sum of the weights of the two households. A

[7] Given simple random sampling at the household level, a household's person-level weight is the number of people in the household.

household's weight is its number of members because the unit of analysis is the household member.

As a final example, a program might count as *participants* only those household members who directly participate in the program. For the example here, this means that some—but not all—household members are counted. The person-level rate is now the participant-weighted average[8] of the poverty statuses (or estimated poverty likelihoods) of households with participants, or $\frac{1 \cdot 1 + 2 \cdot 0}{1 + 2} = \frac{1}{3} = 0.33 = 33$ percent. The first "1" in the "$1 \cdot 1$" in the numerator is the first household's weight because it has one participant, and the second "1" represents its poverty status (poor) or its estimated poverty likelihood. In the "$2 \cdot 0$" term in the numerator, the "2" is the second household's weight because it has two participants, and the zero represents its poverty status (non-poor) or its estimated poverty likelihood. The "$1 + 2$" in the denominator is the sum of the weights of the two households. Each household's weight is its number of participants because the unit of analysis is the participant.

To sum up, estimated poverty rates are weighted averages of households' poverty statuses (or estimated poverty likelihoods), where—assuming simple random sampling at the household level—the weights are the number of relevant units in the household. When reporting, organizations should make explicit the unit of analysis—whether household, household member, or participant—and explain why that unit is relevant.

[8] Given simple random sampling at the household level, a household's participant-level weight is the number of participants in the household.

Table 1 reports poverty lines and poverty rates for households and people in the 2007 and 2014 ECAM for Cameroon as a whole, for the construction/calibration sample, and for the 2007 and 2014 validation samples. For all of Cameroon, for each of Cameroon's 10 administrative regions, and for Yaoundé and Douala, Table 2 reports poverty lines and poverty rates for households and people by urban/rural/all.

Household-level poverty rates are reported because—as shown above—household-level poverty likelihoods can be straightforwardly converted into poverty rates for other units of analysis and because sampling is almost always done at the level of households. This is also why the scorecard is constructed, calibrated, and validated with household weights. Person-level poverty rates are also included in Tables 1 and 2 because these are the rates reported by the government of Cameroon. Furthermore, popular discussions and policy discourse usually proceed in terms of person-level rates, and the goal of pro-poor programs is to help people (not households) to improve their well-being.

2.3 Definition of *poverty*, and the national poverty line

A household's *poverty status* as poor or non-poor depends on whether its per-adult-equivalent or per-capita consumption is below a given poverty line. Thus, a definition of *poverty* is the combination of a poverty line along with a measure of consumption.

INS (2013) suggests that poverty-rate estimates from the 2007 and 2014 ECAM are comparable, which means that they both use the same definition of *poverty* (that is, the same constant-price poverty lines and the same measure of consumption).

According to INS (2008), the derivation of Cameroon's national poverty line (sometimes called here "100% of the national line") follows the "cost-of-basic-needs" method of Ravallion (1998). It begins with a food-poverty line defined as the cost (based on data from the 2001 ECAM) of a food basket with 2,900 Calories, the assumed minimum daily intake for an adult equivalent. The 2001 national poverty line is then derived as this food line, plus the non-food consumption observed for households in the 2001 ECAM whose total (food plus non-food) consumption is at the food line.

To arrive at a 2007 national (food-plus-non-food) poverty line, the 2001 food line is inflated—separately for each of the 12 poverty-line regions used with the ECAM—in step with the increase in the cost of the food basket between 2001 and 2007.[9] This step is then repeated to adjust for price changes between 2007 and 2014. In the same way, the non-food allowance is inflated to reflect regional changes in the prices of non-food items.

For Cameroon overall, the resulting national (food-plus-non-food) poverty line (in prices in Yaoundé on average in the fourth quarter of 2014) is XAF911 per adult equivalent per day (Table 1). This implies country-level poverty rates of 26.7 percent

[9] Within a given region, there are no urban/rural price adjustments.

(households) and 37.5 percent (people). This person-level rate matches that in World Bank (2016).

2.4 Supported poverty lines

Because pro-poor organizations in Cameroon may want to use different or various poverty lines, this paper calibrates scores from its single new 2014 scorecard to poverty likelihoods for 15 lines:

- 100% of national
- 150% of national
- 200% of national
- $1.25/day 2005 PPP
- $2.00/day 2005 PPP
- $2.50/day 2005 PPP
- $5.00/day 2005 PPP
- $1.90/day 2011 PPP
- $3.10/day 2011 PPP
- Line marking the poorest half of people below 100% of the national line
- First-quintile (20^{th}-percentile) line
- Second-quintile (40^{th}-percentile) line
- Median (50^{th}-percentile) line
- Third-quintile (60^{th}-percentile) line
- Fourth-quintile (80^{th}-percentile) line

The lines for 150% and 200% of the national line are multiples of 100% of the national line.

The international 2005 and 2011 PPP lines are derived from:

- PPP exchange rates for Cameroon for "individual consumption expenditure by households":
  - 2005:[10] XAF294.497 per $1.00
  - 2011:[11] XAF230.375 per $1.00
- Average Consumer Price Index (CPI) for all of Cameroon:[12]
  - Fourth quarter 2007: 199.15
  - 2011 calendar-year: 221.82
  - Fourth quarter 2014: 239.83
- All-Cameroon person-weighted average $1.25/day 2005 PPP line in prices in Yaoundé in the fourth quarter of 2007 (Schreiner, 2013a): XAF394.41
- Regional price deflators from the INS for the 2007 and 2014 ECAM:

Region	2007	2014
Douala	1.020	1.04421
Yaoundé	1.000	1.00000
Adamaoua	0.962	0.93612
Centre	0.965	1.00083
Est	0.902	0.87192
Extrême-Nord	0.808	0.96304
Littoral	0.964	0.98081
Nord	0.824	0.99382
Nord-Ouest	0.853	1.00004
Ouest	0.846	0.88047
Sud	0.928	1.02214
Sud-Ouest	0.943	0.99462

- Person-weighted average regional price deflators for all of Cameroon:
  - 2007: 0.9016
  - 2014: 0.9791

[10] World Bank, 2008.

[11] `iresearch.worldbank.org/PovcalNet/Detail.aspx?Format=Detail&C0=CMR_3&PPP0=230.38&PL0=1.90&Y0=2007&NumOfCountries=1`, retrieved 30 August 2016.

[12] The CPI series (base = 100 January 2001) splices monthly data from INS (2008, p. 11) and the INS's *Annuaire Statistique du Cameroun* for 2011 (p. 273) (`stat.cm/downloads/annuaire/2012/Annuaire-2012-chapitre-19.pdf`) and 2015 (p. 316) (`stat.cm/downloads/2016/annuaire2016/CHAPITRE19_PRIX.pdf`), both retrieved 30 August 2016.

A given region's \$1.25/day 2005 PPP line in prices in Yaoundé on average in the fourth quarter of 2014 is then

$$\frac{\text{XAF394.41} \cdot \left(\frac{\text{CPI}_{\text{2011q4}}}{\text{CPI}_{\text{2007q4}}} \right) \cdot \text{Regional price deflator}}{\text{Average regional price deflator}}.$$

For the example region of Adamaoua in 2014, this works out to:

$$\frac{\text{XAF394.41} \cdot \left(\frac{239.83}{199.15} \right) \cdot 0.93612}{0.9791} = \text{XAF454.13 (Table 2).}$$

The all-Cameroon \$1.25/day 2005 PPP line is the person-weighted average of the regional \$1.25/day lines. For 2014, this is XAF475 per person per day, giving a household-level poverty rate of 15.7 percent and a person-level poverty rate of 24.0 percent (Table 1).

The World Bank's PovcalNet[13] does not report a \$1.25/day 2005 PPP line nor a poverty rate for Cameroon in 2014. For 2007, PovcalNet's person-level poverty rate is 27.61 percent,[14] close to the 28.8 percent in Table 1 here for this line in 2007. The \$1.25/day estimates here are to be preferred (Schreiner, 2014b) because PovcalNet does not report:

- Its \$1.25/day 2005 PPP line in XAF
- The time/place of its price units
- Whether/how it adjusts for regional differences in prices
- How it deflates 2005 PPP factors over time

[13] `iresearch.worldbank.org/PovcalNet/`, retrieved 29 August 2016.

[14] `iresearch.worldbank.org/PovcalNetPPP2005/Detail.aspx?Format=Detail&C0=CMR_3&PPP0=294.50&PL0=1.25&Y0=2007&NumOfCountries=1`, retrieved 30 August 2016. PovcalNet does not report its \$1.25/day 2005 PPP line for 2007 in XAF.

The other 2005 PPP lines are multiples of the $1.25/day line.

Cameroon's $1.90/day 2011 PPP line is derived analogously to its $1.25/day 2005 PPP line. In 2014, a given region's $1.90/day 2011 PPP line in prices in Yaoundé on average in the fourth quarter of 2014 is

$$\frac{\$1.90 \cdot 2011\,\text{PPP} \cdot \left(\frac{\text{CPI}_{2014q4}}{\text{CPI}_{2011}}\right) \cdot \text{Regional price deflator}}{\text{Average regional price deflator}}.$$

For the example region of Adamaoua in 2014, this works out to:

$$\frac{\$1.90 \cdot 230.375 \cdot \left(\frac{239.83}{221.82}\right) \cdot 0.93612}{0.9791} = \text{XAF452.47 (Table 2)}.$$

The all-Cameroon $1.90/day 2005 PPP line is the person-weighted average of the regional $1.90/day lines. For 2014, this is XAF473 per person per day, giving a household-level poverty rate of 15.6 percent and a person-level poverty rate of 23.9 percent (Table 1).[15]

PovcalNet does not report poverty lines nor rates for $1.90/day 2005 PPP for Cameroon in 2014. For 2007, PovcalNet reports a poverty line of XAF387 per person per day and a person-level poverty rate is 29.27 percent.[16] These are close to this paper's XAF393/person/day and 28.6 percent in Table 1. The estimates here are to be preferred for the reasons noted above.

[15] In Cameroon, $1.25/day 2005 PPP is almost the same as $1.90/day 2011 PPP. This is a coincidence, and it is not generally the case elsewhere (Ferreira *et al.*, 2015).

[16] `iresearch.worldbank.org/PovcalNet/Detail.aspx?Format=Detail&C0=CMR_3&PPP0=230.38&PL0=1.90&Y0=2007&NumOfCountries=1`, retrieved 30 August 2016.

The $3.10/day 2011 PPP line is a multiple of the $1.90/day line.

The line that marks the poorest half of people below 100% of the national line is defined as the median of the aggregate household per-capita consumption of people (not households) below 100% of the national line (U.S. Congress, 2004). Unlike all the previous (non-relative) lines, this line (and the percentile-based lines below) is derived by:

- Putting all regional price adjustments in the measure of consumption rather than in the poverty line
- Deriving a single line for all of Cameroon
- Taking all price adjustments out of consumption and putting them back in the regional lines[17]

Microenterprise programs in Cameroon who use the scorecard to report the number of their participants who are "very poor" to USAID should use the $1.90/day 2011 PPP line. This is because USAID defines the "very poor" as those people in

[17] This corrects how the scorecard derived this line prior to 2016 (in particular, in Schreiner 2013a). Formerly, price adjustments were left in the poverty line and compared with nominal consumption to find a line in each poverty-line region that marked the poorest half of people below 100% of the national line in that particular poverty-line region. Both approaches produce a person-level poverty rate that is half that of 100% of the national line, but the set of people who are identified as *poor* differs. Unlike the former approach, the current approach correctly identifies as *poor* the poorest half of all people in the country whose price-adjusted consumption is below the single, all-country national line. This implies that the correction in Schreiner (2014b) of the derivation used for this line by IRIS Center for its Poverty-Assessment Tool is itself wrong, and IRIS Center's approach (the one now used here) is correct (although IRIS Center still incorrectly derives this line based on households instead of people).

households whose daily per-capita consumption is below the highest of the following two poverty lines in 2014:

- The line that marks the poorest half of people below 100% of the national line (XAF420, with a person-level poverty rate of 18.7 percent, Table 1)
- $1.90/day 2011 PPP (XAF473, with a person-level poverty rate of 23.9 percent)

The scorecard also supports percentile-based poverty lines for Cameroon. This facilitates a number of types of analyses. For example, the second-quintile (40^{th}-percentile) line might be used to help track Cameroon's progress toward the World Bank's (2013) goal of "shared prosperity/inclusive economic growth", defined as income growth among the bottom 40 percent of the world's people.

The four quintile lines, analyzed together, could also be used to look at the relationship of consumption with health outcomes (or anything else related with the distribution of consumption). The scorecard thus offers an alternative for health-equity analyses that have typically used a "wealth index" such as that supplied with the data from the Demographic and Health Surveys (Rutstein and Johnson, 2004) to compare some estimate of wealth with health outcomes.

Of course, analysts could always do (and can still do) relative-wealth analyses with scores from the scorecard. But support for relative consumption lines now allows a more straightforward use of a single tool (the scorecard) to analyze any or all of:

- Relative wealth (via scores)
- Absolute consumption (via poverty likelihoods and absolute poverty lines)
- Relative consumption (via poverty likelihoods and percentile-based poverty lines)

Unlike the scorecard, wealth indexes only serve to analyze relative wealth. Furthermore, the scorecard—unlike wealth indexes based on Principal Component Analysis or similar approaches—uses a straightforward, well-understood standard whose definition is external to the scorecard itself (consumption related to a poverty line defined in monetary terms).

In contrast, a wealth index opaquely defines *poverty* in terms of its own indicators and points, without reference to an external standard. This means that two wealth indexes with different indicators or different points—even if derived from the same data for a given country—imply two different definitions of *poverty*. In the same set-up, two scorecards would both apply a single definition of *poverty*.

3. Scorecard construction

For Cameroon, about 70 candidate indicators are initially prepared in the areas of:

- Household composition (such as the number of members)
- Education (such as whether the (oldest) female head/spouse knows how to read and write a simple sentence in French or English)
- Housing (such as the main material of the floor of the residence)
- Ownership of durable assets (such as electric irons or television sets)
- Employment (such as the number of household members who work)

Table 3 lists the candidate indicators, ordered by the entropy-based "uncertainty coefficient" (Goodman and Kruskal, 1979) that measures how well a given indicator predicts poverty status on its own.[18]

One possible application of the scorecard is to measure *changes* in poverty through time. Thus, when selecting indicators—and holding other considerations constant—preference is given to more sensitive indicators. For example, the ownership of an electric iron is probably more likely to change in response to changes in poverty than is the age of the male head/spouse.

The scorecard itself is built using 100% of the national poverty line and Logit regression on the construction sub-sample. Indicator selection uses both judgment and statistics. The first step is to use Logit to build one scorecard for each candidate indicator. The power of each one-indicator scorecard to rank households by poverty status is measured as "c" (SAS Institute Inc., 2004).

[18] The uncertainty coefficient is not used when selecting scorecard indicators. It is just a way to order the candidate indicators listed in Table 3.

One of these one-indicator scorecards is then selected based on several factors (Schreiner *et al.*, 2014; Zeller, 2004). These include improvement in accuracy, likelihood of acceptance by users (determined by simplicity, cost of collection, and "face validity" in terms of experience, theory, and common sense), sensitivity to changes in poverty, variety among indicators, applicability across regions, tendency to have a slow-changing relationship with poverty over time, relevance for distinguishing among households at the poorer end of the distribution of consumption, and verifiability.

A series of two-indicator scorecards are then built, each adding a second indicator to the one-indicator scorecard selected from the first round. The best two-indicator scorecard is then selected, again using judgment to balance statistical accuracy with the non-statistical criteria. These steps are repeated until the scorecard has 10 indicators that work well together.

The final step is to transform the Logit coefficients into non-negative integers such that total scores range from 0 (most likely below a poverty line) to 100 (least likely below a poverty line).

This algorithm is similar to common R^2-based stepwise least-squares regression. It differs from naïve stepwise in that the selection of indicators considers both statistical[19] and non-statistical criteria. The use of non-statistical criteria can improve robustness through time and across non-nationally representative groups. It also helps ensure that indicators are simple, common-sense, and acceptable to users.

The single scorecard here applies to all of Cameroon. Tests for Indonesia (World Bank, 2012), Bangladesh (Sharif, 2009), India and Mexico (Schreiner, 2006 and 2005a), Sri Lanka (Narayan and Yoshida, 2005), and Jamaica (Grosh and Baker, 1995) suggest that segmenting poverty-assessment tools by urban/rural does not improve targeting accuracy much.[20] In general, segmentation may improve the accuracy of estimates of poverty rates (Diamond *et al.*, 2016; Tarozzi and Deaton, 2007), but it may also increase the risk of overfitting (Haslett, 2012).

[19] The statistical criterion for selecting an indicator is not the p values of its coefficients but rather the indicator's contribution to the ranking of households by poverty status.
[20] In contrast, Stoeffler, Nguetse-Tegoum, and Mills (2015) find that separate urban/rural poverty-assessment tools does improve targeting accuracy in Cameroon.

4. Practical guidelines for scorecard use

The main challenge of scorecard design is not to maximize statistical accuracy but rather to improve the chances that the scorecard is actually used (Schreiner, 2005b). When scoring projects fail, the reason is not usually statistical inaccuracy but rather the failure of an organization to decide to do what is needed to integrate scoring in its processes and to train and convince its employees to use the scorecard properly (Schreiner, 2002). After all, most reasonable scorecards have similar targeting accuracy, thanks to the empirical phenomenon known as the "flat maximum" (Caire and Schreiner, 2012; Hand, 2006; Baesens *et al.*, 2003; Lovie and Lovie, 1986; Kolesar and Showers, 1985; Stillwell, Barron, and Edwards, 1983; Dawes, 1979; Wainer, 1976; Myers and Forgy, 1963). The bottleneck is less technical and more human, not statistics but organizational-change management. Accuracy is easier to achieve than adoption.

The scorecard here is designed to encourage understanding and trust so that users will want to adopt it on their own and use it properly. Of course, accuracy matters, but it must be balanced with simplicity, ease-of-use, and "face validity". Programs are more likely to collect data, compute scores, and pay attention to the results if, in their view, scoring does not imply a lot of additional work and if the whole process generally seems to them to make sense.

To this end, Cameroon's scorecard fits on one page. The construction process, indicators, and points are simple and transparent. Additional work is minimized; non-specialists can compute scores by hand in the field because the scorecard has:

- Only 10 indicators
- Only "multiple-choice" indicators
- Only simple points (non-negative integers, and no arithmetic beyond addition)

The scorecard (and its "Back-page Worksheet") is ready to be photocopied. A field worker using the scorecard in Cameroon would:

- Record the interview identifier, interview date, country code ("CMR"), scorecard code ("002") and the sampling weight assigned by the organization's survey design to the household of the participant (if known)
- Record the names and identifiers of the participant (who may not be the same as the respondent), of the field agent, and of the relevant organizational service point
- Complete the "Back-page Worksheet" with each household member's first name or nickname
- Based on what has already been recorded on the "Back-page Worksheet", record household size (the number of household members) in the scorecard header next to "Number of household members:"
- Based on what has already been recorded on the "Back-page Worksheet", mark the response to the first scorecard indicator ("How many members does the household have?") based on the number of household members
- Read the rest of the scorecard indicators to the respondent one-by-one. An exception is the third question ("What is the main material of the floor of the residence?"). The enumerator should try to answer this one question by observation without asking the respondent. If this is not possible, then the enumerator should ask the question of the respondent
- Draw circles around the relevant responses and their points, and writing each point value in the far right-hand column
- Add up the points to get a total score
- Implement targeting policy (if any)
- Deliver the paper scorecard to a central office for data entry and filing

Of course, field workers must be trained. The quality of outputs depends on the quality of inputs. If organizations or field workers gather their own data and believe that they have an incentive to exaggerate poverty rates (for example, if managers or funders reward them for higher poverty rates), then it is wise to do on-going quality control via data review and random audits (Matul and Kline, 2003).[21] IRIS Center (2007a) and Toohig (2008) are useful nuts-and-bolts guides for budgeting, training field workers and supervisors, logistics, sampling, interviewing, piloting, recording data, and controlling quality.

[21] If a program does not want field workers and respondents to know the points associated with responses, then it can give them a version of the scorecard that does not display the points and then apply the points and compute scores later at a central office. Even if points are hidden, however, field workers and respondents can use common sense to guess how response options are linked with poverty. Schreiner (2012b) argues that hiding points in Colombia (Camacho and Conover, 2011) did little to deter cheating and that, in any case, cheating by the user's central office was more damaging than cheating by field workers and respondents.

In particular, while collecting scorecard indicators is relatively easier than alternative ways of measuring poverty, it is still absolutely difficult. Training and explicit definitions of terms and concepts in the scorecard are essential, and field workers should scrupulously study and follow the "Guidelines for the Interpretation of Scorecard Indicators" found after the "References" section in this paper, as these "Guidelines"—along with the "Back-page Worksheet"—are integral parts of the Simple Poverty Scorecard tool.[22]

For the example of Nigeria, one study (Onwujekwe, Hanson, and Fox-Rushby, 2006) found distressingly low inter-rater and test-retest correlations for indicators as seemingly simple as whether a household owns an automobile. At the same time, Grosh and Baker (1995) suggest that gross underreporting of assets does not affect targeting. For the first stage of targeting in a conditional cash-transfer program in Mexico, Martinelli and Parker (2007, pp. 24–25) find that "underreporting [of asset ownership] is widespread but not overwhelming, except for a few goods . . . [and] overreporting is common for a few goods". Still, as is done in Mexico in the second stage of its targeting process, most false self-reports can be corrected (or avoided in the first place) by field workers who make a home visit. This is the recommended procedure for organizations who use scoring for targeting in Cameroon.

[22] The guidelines here are the only ones that organizations should give to field workers. All other issues of interpretation should be left to the judgment of field workers and respondents, as this seems to be what Cameroon's INS did in the ECAM.

In terms of implementation and sampling design, an organization must make choices about:

- Who will do the interviews
- How responses and scores will be recorded
- Which participants will be interviewed
- How many participants will be interviewed
- How frequently participants will be interviewed
- Whether scoring will be applied at more than one point in time
- Whether the same participants will be scored at more than one point in time

In general, the sampling design should follow from the organization's goals for the exercise, the questions to be answered, and the budget. The main goal should be to make sure that the sample is representative of a well-defined population and that the scorecard will inform an issue that matters to the organization.

The non-specialists who apply the scorecard with participants in the field can be:

- Employees of the organization
- Third parties

Responses, scores, and poverty likelihoods can be recorded on:

- Paper in the field, and then filed at a central office
- Paper in the field, and then keyed into a database or spreadsheet at a central office
- Portable electronic devices in the field, and then uploaded to a database

Given a population of participants relevant for a particular business question, the participants to be scored can be:

- All relevant participants (a census)
- A representative sample of relevant participants
- All relevant participants in a representative sample of relevant field offices and/or in a representative sample of relevant field agents
- A representative sample of relevant participants in a representative sample of relevant field offices and/or in a representative sample of relevant field agents

If not determined by other factors, the number of participants to be scored can be derived from sample-size formulas (presented later) to achieve a desired confidence level and a desired confidence interval. To have a chance to meaningfully inform questions that matter to the organization, however, the focus should be less on having a sample size large enough to achieve some arbitrary level of statistical significance and more on having a representative sample from a well-defined population that is relevant for issues that matter to the program.

The frequency of application can be:

- As a once-off project (precluding measuring change)
- Every three years (or at any other fixed or variable time interval, allowing measuring change)
- Each time a field worker visits a participant at home (allowing measuring change)

When a scorecard is applied more than once in order to measure changes in poverty rates, it can be applied:

- With a different set of participants from the same population
- With the same set of participants

An example set of choices is illustrated by BRAC and ASA, two microfinance organizations in Bangladesh who each have about 7 million participants and who declared their intention to apply the Simple Poverty Scorecard tool for Bangladesh (Schreiner, 2013a) with a sample of about 25,000. Their design is that all loan officers in a random sample of branches will score all participants each time they visit a homestead (about once a year) as part of their standard due diligence prior to loan disbursement. They record responses on paper in the field before sending the forms to a central office to be entered into a database and converted to poverty likelihoods.

5. Estimates of a household's poverty likelihood

The sum of scorecard points for a household is called the *score*. For Cameroon, scores range from 0 (most likely below a poverty line) to 100 (least likely below a poverty line). While higher scores indicate less likelihood of being poor, the scores themselves have only relative units. For example, doubling the score decreases the likelihood of being below a given poverty line, but it does not cut it in half.

To get absolute units, scores are converted to *poverty likelihoods*, that is, probabilities of being below a poverty line. This is done via simple look-up tables. For the example of 100% of the national line, scores of 25–29 have a poverty likelihood of 51.3 percent, and scores of 30–34 have a poverty likelihood of 36.9 percent (Table 4).

The poverty likelihood associated with a score varies by poverty line. For example, scores of 25–29 are associated with a poverty likelihood of 51.3 percent for 100% of the national line but 23.3 percent for the $1.90/day 2011 PPP line.[23]

[23] From Table 4 on, many tables have 15 versions, one for each of the 15 poverty lines. To keep them straight, they are grouped by line. Single tables pertaining to all lines appear with the first group of tables for 100% of the national line.

5.1 Calibrating scores with poverty likelihoods

A given score is associated ("calibrated") with a poverty likelihood by defining the poverty likelihood as the share of households in the calibration sub-sample who have the score and who have per-adult-equivalent or per-capita consumption below a given poverty line.

For the example of 100% of the national line (Table 5), there are 7,824 (normalized) households in the calibration sub-sample with a score of 25–29. Of these, 4,013 (normalized) are below the poverty line. The estimated poverty likelihood associated with a score of 25–29 is then 51.3 percent, because 4,013 ÷ 7,824 = 51.3 percent.

To illustrate with 100% of the national line and a score of 30–34, there are 8,063 (normalized) households in the calibration sub-sample, of whom 2,975 (normalized) are below the line (Table 5). The poverty likelihood for this score range is then 2,975 ÷ 8,063 = 36.9 percent.

The same method is used to calibrate scores with estimated poverty likelihoods for all 15 poverty lines.[24]

[24] To ensure that poverty likelihoods never increase as scores increase, likelihoods across series of adjacent scores are sometimes iteratively averaged before grouping scores into ranges. This preserves unbiasedness while keeping users from balking when sampling variation in score ranges with few households would otherwise lead to higher scores being linked with higher poverty likelihoods.

Even though the scorecard is constructed partly based on judgment related to non-statistical criteria, the calibration process produces poverty likelihoods that are objective, that is, derived from quantitative poverty lines and from survey data on consumption. The calibrated poverty likelihoods would be objective even if the process of selecting indicators and points did not use any data at all. In fact, objective scorecards of proven accuracy are often constructed using only expert judgment to select indicators and points (Fuller, 2006; Caire, 2004; Schreiner *et al.*, 2014). Of course, the scorecard here is constructed with both data and judgment. The fact that this paper acknowledges that some choices in scorecard construction—as in any statistical analysis—are informed by judgment in no way impugns the objectivity of the poverty likelihoods, as their objectivity depends on using data in score calibration, not on using data (and nothing else) in scorecard construction.

Although the points in the Cameroon scorecard are transformed coefficients from a Logit regression, (untransformed) scores are not converted to poverty likelihoods via the Logit formula of $2.718281828^{\text{score}} \text{ x } (1 + 2.718281828^{\text{score}})^{-1}$. This is because the Logit formula is esoteric and difficult to compute by hand. Non-specialists find it more intuitive to define the poverty likelihood as the share of households with a given score in the calibration sample who are below a poverty line. Going from scores to poverty likelihoods in this way requires no arithmetic at all, just a look-up table. This approach to calibration can also improve accuracy, especially with large samples.

5.2 Accuracy of estimates of households' poverty likelihoods

As long as the relationships between indicators and poverty do not change over time, and as long as the scorecard is applied to households who are representative of the same population from which the scorecard was originally constructed, then this calibration process produces unbiased estimates of poverty likelihoods. *Unbiased* means that in repeated samples from the same population, the average estimate matches the true value. Given the assumptions above, the scorecard also produces unbiased estimates of poverty rates at a point in time and unbiased estimates of changes in poverty rates between two points in time.[25]

Of course, the relationships between indicators and poverty do change to some unknown extent over time, and they also vary across sub-national groups in Cameroon's population. Thus, the scorecard will generally be biased when applied after December 2014 (the last month of fieldwork for the 2014 ECAM) or when applied with sub-groups that are not nationally representative.

[25] This is because these estimates of populations' poverty rates are linear functions of the unbiased estimates of households' poverty likelihoods.

How accurate are estimates of households' poverty likelihoods, given the assumption of unchanging relationships between indicators and poverty over time and the assumption of a sample that is representative of Cameroon as a whole? To find out, the scorecard is applied to 1,000 bootstrap samples of size $n = 16{,}384$ with the 2014 validation sample. Bootstrapping means to:

- Score each household in a validation sample
- Draw a bootstrap sample *with replacement* from a validation sample
- For each score range, compute the observed poverty likelihood in the bootstrap sample, that is, the share of households with the score and with consumption below a poverty line
- For each score range, record the difference between the estimated poverty likelihood (Table 4) and the poverty likelihood observed in the bootstrap sample
- Repeat the previous three steps 1,000 times
- For each score range, report the average difference between estimated and observed poverty likelihoods across the 1,000 bootstrap samples
- For each score range, report the two-sided intervals containing the central 900, 950, and 990 differences between estimated and observed poverty likelihoods

For each score range and for $n = 16{,}384$, Table 6 shows the errors, that is, the average differences between estimated poverty likelihoods and observed poverty likelihoods. It also shows confidence intervals for the differences.

For the 100% of the national line, the average poverty likelihood across bootstrap samples for scores of 25–29 in the 2014 validation sample is too low by 1.0 percentage points. For scores of 30–34, the estimate is too high by 1.0 percentage points.[26]

[26] These differences are not zero, in spite of the estimator's unbiasedness, because the scorecard comes from a single sample. The average difference by score would be zero if samples were repeatedly drawn from the population and split into sub-samples before repeating the entire process of scorecard construction/calibration and validation.

The 90-percent confidence interval for the differences for scores of 25–29 is ±2.7 percentage points (Table 6). This means that in 900 of 1,000 bootstraps, the average difference between the estimate and the observed value for households in this score range is between –3.7 and +1.7 percentage points (because –1.0 – 2.7 = –3.7, and –1.0 + 2.7 = +1.7). In 950 of 1,000 bootstraps (95 percent), the difference is –1.0 ± 3.2 percentage points, and in 990 of 1,000 bootstraps (99 percent), the difference is –1.0 ± 4.1 percentage points.

A couple of the absolute differences between estimated poverty likelihoods and observed values in Table 6 for 100% of the national line are large. There are differences because the 2014 validation sample is a single sample that—thanks to sampling variation—differs in distribution from the construction/calibration sub-samples and from Cameroon's population. For targeting, however, what matters is less the difference in all score ranges and more the difference in the score ranges just above and below the targeting cut-off. This mitigates the effects of bias and sampling variation on targeting (Friedman, 1997). Section 8 below looks at targeting accuracy in detail.

In addition, if estimates of groups' poverty rates are to be usefully accurate, then errors for individual households' poverty likelihoods must largely balance out. As discussed in the next section, this is generally the case for nationally representative samples in 2014, although it holds less well for samples from sub-national populations or in other time periods.

Another possible source of differences between estimates and observed values is overfitting. The scorecard here is unbiased, but it may still be *overfit* when applied after the end of the ECAM fieldwork in December 2014. That is, the scorecard may fit the construction/calibration data from 2014 so closely that it captures not only some real patterns but also some random patterns that, due to sampling variation, show up only in the 2014 ECAM construction/calibration data but not in the overall population of Cameroon. Or the scorecard may be overfit in the sense that it is not robust when relationships between indicators and poverty change over time or when the scorecard is applied to samples that are not nationally representative.

Overfitting can be mitigated by simplifying the scorecard and by not relying only on data but rather also considering theory, experience, and judgment. Of course, the scorecard here does this. Combining scorecards can also reduce overfitting, at the cost of greater complexity.

Most errors in individual households' likelihoods do balance out in the estimates of poverty rates for nationally representative samples (see the next two sections). Furthermore, at least some of the differences in change-over-time estimates come from non-scorecard sources such as changes in the relationships between indicators and poverty, sampling variation, changes in poverty lines, inconsistencies in data quality across time, and imperfections in price adjustments across time and across geographic regions. These factors can be addressed only by improving the availability, frequency, quantity, and quality of data from national consumption surveys (which is beyond the scope of the scorecard) or by reducing overfitting (which likely has limited returns, given the scorecard's parsimony).

6. Estimates of a poverty rate at a point in time

A population's estimated poverty rate at a point in time is the average of the estimated poverty likelihoods of the sampled households in the group.

To illustrate, suppose a program samples three households on 1 January 2017 and that they have scores of 20, 30, and 40, corresponding to poverty likelihoods of 64.8, 36.9, and 14.2 percent (100% of the national line, Table 4). The group's estimated poverty rate is the households' average poverty likelihood of $(64.8 + 36.9 + 14.2) \div 3 =$ 38.6 percent.

Be careful; the group's poverty rate is *not* the poverty likelihood associated with the average score. Here, the average score is 30, which corresponds to a poverty likelihood of 36.9 percent. This differs from the 38.6 percent found as the average of the three individual poverty likelihoods associated with each of the three scores. Unlike poverty likelihoods, scores are ordinal symbols, like letters in the alphabet or colors in the spectrum. Because scores are not cardinal numbers, they cannot meaningfully be added up or averaged across households. Only three operations are valid for scores: conversion to poverty likelihoods, analysis of distributions (Schreiner, 2012a), or comparison—if desired—with a cut-off for targeting. There are a few contexts in which the analysis of scores is appropriate, but, in general, the safest rule to follow is: If you are not completely sure what to do, then use poverty likelihoods, not scores.

Scores from the new 2014 scorecard are calibrated with data from the 2014 ECAM for all 15 poverty lines. The process of calibrating scores to poverty likelihoods and the approach to estimating poverty rates is exactly the same for all poverty lines. For users, the only difference in terms of what they do with one poverty line versus with another is the specific look-up table used to convert scores to poverty likelihoods.

After switching from the old 2007 scorecard to the new 2014 scorecard, legacy users can salvage existing poverty-rate estimates for measuring change over time with supported poverty lines, with a baseline from the old 2007 scorecard, and with a follow-up from the new 2014 scorecard.

6.1 Accuracy of estimated poverty rates at a point in time

For the new 2014 scorecard applied to 1,000 bootstraps of $n = 16{,}384$ from the 2014 validation sample and 100% of the national poverty line, the average error (difference between the estimate and the value in the 2014 ECAM) for a poverty rate at a point in time is –1.1 percentage points (Table 8, summarizing Table 7 across all poverty lines). Across all 15 poverty lines in the 2014 validation sample, the maximum average absolute error is 2.0 percentage points, and the average absolute error is about 1.1 percentage points. At least part of these differences is due to sampling variation in the division of the 2014 ECAM into sub-samples.

When estimating poverty rates at a point in time for a given poverty line, the average error reported in Table 8 should be subtracted from the average poverty

likelihood to give a corrected estimate. For the example of the new 2014 scorecard and 100% of the national line in the 2014 validation sample, the error is –1.1 percentage points, so the corrected estimate in the three-household example above is 38.6 – (–1.1) = 39.7 percent.

In terms of precision, the 90-percent confidence interval for a group's estimated poverty rate at a point in time with $n = 16{,}384$ is ±0.5 percentage points or better for all poverty lines (Table 8). This means that in 900 of 1,000 bootstraps of this size, the estimate (after correcting for the known average error) is within 0.5 percentage points of the observed value.

For example, suppose that the (uncorrected) average poverty likelihood in a sample of $n = 16{,}384$ with the new 2014 scorecard and 100% of the national line is 38.6 percent. Then estimates in 90 percent of such samples would be expected to fall in the range of 38.6 – (–1.1) – 0.4 = 39.3 percent to 38.6 – (–1.1) + 0.4 = 40.1 percent, with the most likely observed value being the corrected estimate in the middle of this range, that is, 38.6 – (–1.1) = 39.7 percent. This is because the original (uncorrected) estimate is 38.6 percent, the average error is –1.1 percentage points, and the 90-percent confidence interval for 100% of the national line in the 2014 validation sample with this sample size is ±0.4 percentage points (Table 8).

6.2 Formula for standard errors for estimates of poverty rates

How precise are the point-in-time estimates? Because these estimates are averages, they have (in "large" samples) a Normal distribution and can be characterized by their error (average difference vis-à-vis observed values), together with their standard error (precision).

Schreiner (2008) proposes an approach to deriving a formula for the standard errors of estimated poverty rates at a point in time from indirect measurement via poverty-assessment tools. It starts with Cochran's (1977) textbook formula of $\pm c = \pm z \cdot \sigma$ that relates confidence intervals with standard errors in the case of the direct measurement of ratios, where:

$\pm c$ is a confidence interval as a proportion (*e.g.*, ± 0.02 for ± 2 percentage points),

z is from the Normal distribution and is $\begin{cases} 1.04 \text{ for confidence levels of 70 percent} \\ 1.28 \text{ for confidence levels of 80 percent} \\ 1.64 \text{ for confidence levels of 90 percent} \end{cases}$,

σ is the standard error of the estimated poverty rate, that is, $\sqrt{\frac{\hat{p} \cdot (1 - \hat{p})}{n}} \cdot \phi$,

$\hat{p}$ is the estimated proportion of households below the poverty line in the sample,

ϕ is the finite population correction factor $\sqrt{\frac{N - n}{N - 1}}$,

N is the population size, and

n is the sample size.

For example, Cameroon's 2014 ECAM gives a direct-measurement estimate of the household-level poverty rate for 100% of the national line in the 2014 validation sample of $\hat{p} = 26.6$ percent (Table 1).[27] If this estimate came from a sample of $n =$ 16,384 households from a population N of 4,816,160 (the number of households in Cameroon in 2014 according to the ECAM sampling weights), then the finite population correction ϕ is $\sqrt{\frac{4{,}816{,}160 - 16{,}384}{4{,}816{,}160 - 1}} = 0.9983$, which close to $\phi = 1$. If the desired confidence level is 90-percent ($z = 1.64$), then the confidence interval $\pm c$ is

$$\pm z \cdot \sqrt{\frac{\hat{p} \cdot (1 - \hat{p})}{n}} \cdot \sqrt{\frac{N - n}{N - 1}} = \pm 1.64 \cdot \sqrt{\frac{0.266 \cdot (1 - 0.266)}{16{,}384}} \cdot \sqrt{\frac{4{,}816{,}160 - 16{,}384}{4{,}816{,}160 - 1}} = \pm 0.565$$

percentage points. (If ϕ were taken as 1, then the interval is ± 0.566 percentage points.)

Unlike the 2014 ECAM, however, the scorecard does not measure poverty directly, so this formula is not applicable. To derive a formula for the new 2014 scorecard, consider Table 7, which reports empirical confidence intervals $\pm c$ for the errors for the scorecard applied to 1,000 bootstrap samples of various sizes from the 2014 validation sample. For example, with $n = 16{,}384$ and 100% of the national line in the 2014 validation sample, the 90-percent confidence interval is ± 0.447 percentage points.[28]

[27] The analysis here ignores that poverty-rate estimates from the ECAM are themselves based on samples and so have their own sampling distribution.
[28] Due to rounding, Table 7 displays 0.4, not 0.447.

Thus, the 90-percent confidence interval with $n = 16{,}384$ is ± 0.447 percentage points for the new 2014 scorecard and ± 0.565 percentage points for direct measurement. The ratio of the two intervals is $0.447 \div 0.565 = 0.79$.

Now consider the same exercise, but with $n = 8{,}192$. The confidence interval under direct measurement and 100% of the national line in the 2014 validation sample is $\pm 1.64 \cdot \sqrt{\frac{0.266 \cdot (1 - 0.266)}{8{,}192}} \cdot \sqrt{\frac{4{,}816{,}160 - 8{,}192}{4{,}816{,}160 - 1}} = \pm 0.800$ percentage points. The empirical confidence interval with the new 2014 scorecard (Table 7) is ± 0.656 percentage points. Thus for $n = 8{,}192$, the ratio of the two intervals is $0.656 \div 0.800 = 0.82$.

This ratio of 0.82 for $n = 8{,}192$ is close to the ratio of 0.79 for $n = 16{,}384$. Across all sample sizes of 256 or more in Table 7, these ratios are generally close to each other, and the average of these ratios in the 2014 validation sample turns out to be 0.81, implying that confidence intervals for indirect estimates of poverty rates via Cameroon's new 2014 scorecard and 100% of the national line are—for a given sample size—about 19-percent narrower than confidence intervals for direct estimates via the 2014 ECAM. This 0.81 appears in Table 8 as the "α factor for precision" because if $\alpha = 0.81$, then the formula for confidence intervals c for the new 2014 scorecard is $\pm c = \pm z \cdot \alpha \cdot \sigma$. That is, the formula for the standard error σ for point-in-time estimates of poverty rates via scoring is $\alpha \cdot \sqrt{\frac{\hat{p} \cdot (1 - \hat{p})}{n}} \cdot \sqrt{\frac{N - n}{N - 1}}$.

In general, α can be more or less than 1.00. When α is less than 1.00, it means that the scorecard is more precise than direct measurement. It turns out that α is less than 1.00 for 13 of the 15 poverty lines in Table 8, and it is never higher than 1.06.

The formula relating confidence intervals with standard errors for the scorecard can be rearranged to give a formula for determining sample size before measurement. If $\widetilde{p}$ is the expected poverty rate before measurement, then the formula for sample size n from a population of size N that is based on the desired confidence level that corresponds to z and the desired confidence interval $\pm c$ is $n = N \cdot \left(\frac{z^2 \cdot \alpha^2 \cdot \widetilde{p} \cdot (1 - \widetilde{p})}{z^2 \cdot \alpha^2 \cdot \widetilde{p} \cdot (1 - \widetilde{p}) + c^2 \cdot (N - 1)} \right)$. If the population N is "large" relative to the sample size n, then the finite-population correction factor ϕ can be taken as one (1), and the formula becomes $n = \left(\frac{\alpha \cdot z}{c} \right)^2 \cdot \widetilde{p} \cdot (1 - \widetilde{p})$.

To illustrate how to use this, suppose the population N is 4,816,160 (the number of households in Cameroon in 2014), suppose $c = 0.03752$, $z = 1.64$ (90-percent confidence), and the relevant poverty line is 100% of the national line so that the most sensible expected poverty rate $\widetilde{p}$ is Cameroon's overall poverty rate for that line in 2014 (26.7 percent at the household level, Table 1). The α factor is 0.81 (Table 8). Then the sample-size formula gives $n = 4{,}816{,}160 \cdot \left(\frac{1.64^2 \cdot 0.81^2 \cdot 0.267 \cdot (1 - 0.267)}{1.64^2 \cdot 0.81^2 \cdot 0.267 \cdot (1 - 0.267) + 0.03752^2 \cdot (4{,}816{,}160 - 1)} \right) = 246$, which is close to the sample size of 256 observed for these parameters in Table 7 for 100% of

the national line. Taking the finite population correction factor ϕ as one (1) gives the same result, as $n = \left(\frac{0.81 \cdot 1.64}{0.03752}\right)^2 \cdot 0.267 \cdot (1 - 0.267) = 246$.[29]

Of course, the α factors in Table 8 are specific to Cameroon, its poverty lines, its poverty rates, and this scorecard. The derivation of the formulas for standard errors using the α factors, however, is valid for any poverty-measurement tool following the approach in this paper.

[29] Although USAID has not specified confidence levels nor intervals, IRIS Center (2007a and 2007b) says that a sample size of $n = 300$ is sufficient for USAID reporting. USAID's microenterprise partners in Cameroon should report using the $1.90/day 2011 PPP line. Given the α factor of 0.98 for this line (Table 8), an expected before-measurement household-level poverty rate of 15.6 percent (the all-Cameroon rate for this line in 2014, Table 1), and a confidence level of 90 percent ($z = 1.64$), then $n = 300$ implies a confidence interval of $\pm 1.64 \cdot 0.98 \cdot \sqrt{\frac{0.156 \cdot (1 - 0.156)}{300}} = \pm 3.4$ percentage points.

In practice after the end of fieldwork for the ECAM in December 2014, a program would select a poverty line (say, 100% of the national line), note its participants' population size (for example, $N = 10{,}000$ participants), select a desired confidence level (say, 90 percent, or $z = 1.64$), select a desired confidence interval (say, ± 2.0 percentage points, or $c = \pm 0.02$), make an assumption about $\widetilde{p}$ (perhaps based on a previous measurement such as the household-level poverty rate for 100% of the national line for Cameroon of 26.7 percent in the 2014 ECAM in Table 1), look up α (here, 0.81 in Table 8), assume that the scorecard will still work in the future and for sub-groups that are not nationally representative,[30] and then compute the required sample size. In this illustration,

$$n = 10{,}000 \cdot \left(\frac{1.64^2 \cdot 0.81^2 \cdot 0.267 \cdot (1 - 0.267)}{1.64^2 \cdot 0.81^2 \cdot 0.267 \cdot (1 - 0.267) + 0.02^2 \cdot (10{,}000 - 1)} \right) = 795.$$

[30] This paper reports accuracy for the scorecard applied to its validation sample, but it does not test accuracy for later years or for sub-populations that are not nationally representative. Performance after December 2014 will resemble that in the 2014 ECAM with deterioration over time to the extent that the relationships between indicators and poverty status change.

7. Estimates of changes in poverty rates over time

The change in a population's poverty rate between two points in time is estimated as the change in the average poverty likelihood of a sample of households from the population.

When measuring change, the same definition of *poverty* must be used at both baseline and follow-up, but it is not necessary to use same scorecard at both points. In the case of Cameroon, the baseline estimate can come from the old 2007 scorecard and the follow-up estimate can come from the new 2014 scorecard. This holds for the six poverty lines that are supported for both scorecards.

To give an idea of how accurate the new 2014 scorecard might be when used to measure changes in poverty rates over time from now on, this section looks at how accurate this scorecard would have been, had it been applied with a baseline of the 2014 validation sample and a follow-up of the 2007 validation sample.[31]

[31] In actual use, the baseline precedes the follow-up. The 2014 baseline for the test here is after the 2007 follow-up because the old 2007 scorecard will not be used from now on, so it is not as useful to know how well it would have estimated the change from 2007 to 2014. In any case, such tests are merely indicative—not definitive—as there is no way to know now how well the new 2014 scorecard will work in, say, 2018.

The tests here are stringent because:

- They compare scorecard estimates with observed values from the ECAM
- The long time frame (seven years) increases the risk of inaccuracy due to greater changes in the relationships between indicators and poverty
- The tests are *out-of-sample* in that they use—in both baseline and follow-up—only ECAM data on households that are not used in construction nor calibration of the new 2014 scorecard
- The tests are *out-of-time* in that the follow-up is from a different time (2007) than the data used to construct the scorecard (2014)

Of course, these necessarily backward-looking tests can only give a rough idea of how accurate the scorecard might be when used from now on. After all, the factors that mattered in the past will differ in type and degree from the factors that will matter in the future. This is the unfortunate-but-inevitable nature of scorecards.

Because estimates from the scorecard are unbiased when applied to an unchanging population in which there are unchanging relationships between indicators and poverty, inaccuracies in estimates of change between the two ECAM rounds rounds must be due to some combination of:

- Sampling variation
- Inconsistent data quality
- Inconstancy in the definitions of *poverty* over time
- Imperfections in how well a definition of *poverty* captures a household's consumption-based poverty
- Changes in the relationships between indicators and poverty
- Changes in the composition of Cameroon's population

Of course, the more resistent a scorecard's estimates are to deviations from its assumptions, the better. A scorecard whose real-world inaccuracies are too much to be useful for measuring change in a given context for a given purpose can take no consolation in how well it would work in a (non-existent) world in which all of its assumptions hold.

7.1 Warning: *Change* is not necessarily *impact*

Scoring can estimate change. Of course, poverty could get better or worse, and scoring does not indicate what caused change. This point is often forgotten or confused, so it bears repeating: the scorecard merely estimates change, and it does not, in and of itself, indicate the causes of change. In particular, estimating the impact of participation requires knowing what would have happened to participants if they had not been participants. Knowing this requires either strong assumptions or a control group that resembles participants in all ways except participation. To belabor the point, the scorecard can help estimate the impact of participation only if there is some way to know—or explicit assumptions about—what would have happened in the absence of participation. And that information must come from beyond the scorecard.

7.2 Estimating changes in poverty rates over time

Consider the illustration begun in the previous section. On 1 January 2017, an organization samples three households who score 20, 30, and 40 and so have poverty likelihoods of 64.8, 36.9, and 14.2 percent (100% of the national line, Table 4). Correcting for the known average error for this line in the 2014 validation sample of –1.1 percentage points (Table 8), the corrected baseline estimated poverty rate is the households' average poverty likelihood of [(64.8 + 36.9 + 14.2) ÷ 3] – (–1.1) = 39.7 percent.

After baseline, two sampling approaches are possible for the follow-up round:

- Score a new, independent sample from the same population
- Score the same sample that was scored at baseline

By way of illustration, suppose that three years later on 1 January 2020, the organization samples three additional households who are in the same population as the three original households and finds that their scores are 25, 35, and 45 (poverty likelihoods of 51.3, 21.7, and 5.8 percent, 100% of the national line, Table 4). Adjusting for the known average error, the average poverty likelihood at follow-up is [(51.3 + 21.7 + 5.8) ÷ 3] – (–1.1) = 27.4 percent, an improvement of 39.7 – 27.4 = 12.3 percentage points.[32] Supposing that exactly three years passed between the average baseline interview and the average follow-up interview, the estimated annual rate of decrease in poverty is 12.3 ÷ 3 = 4.1 percentage points per year. About one in eight participants in

[32] Of course, such a huge reduction in poverty in three years is highly unlikely, but this is just an example to show how the scorecard can be used to estimate change.

this hypothetical example cross the poverty line between 2017 and 2020.[33] Among those who start below the line, about one in three (12.3 ÷ 39.7 = 31.0 percent) on net end up above the line.[34]

Alternatively, suppose that the same three original households who were scored at baseline are scored again on 1 January 2020. Given scores of 25, 35, and 45, their follow-up poverty likelihoods are 51.3, 21.7, and 5.8 percent. The average across households of the difference in each given household's baseline poverty likelihood and its follow-up poverty likelihood is [(64.8 – 51.3) + (36.9 – 21.7) + (14.2 – 5.8)] ÷ 3 = 12.4 percentage points.[35] Assuming in this example that there are exactly three years between each household's interviews, the estimated annual decrease in poverty is (again) 12.4 ÷ 3 = 4.1 percentage points per year.

Given the assumptions of the scorecard, both approaches to estimating change through time are unbiased. In general, however, they will give different estimates due to differences in the timing of interviews, in the composition of the samples, and in the nature of two samples being scored once versus one sample being scored twice (Schreiner, 2014a).

[33] This is a net figure; some start above the line and end below it, and vice versa.
[34] The scorecard does not reveal the reasons for this change.
[35] In this case, the error for this line in Table 8 should *not* be subtracted off. The 12.4 percentage points here differs from the 12.3 percentage points in the first approach due to rounding.

7.3 Accuracy for estimated change in two independent samples

The accuracy of scoring's estimates of changes in poverty rates over time is checked using data from the 2007 and 2014 ECAM. While one cannot "drive by looking in the rear-view mirror", historical accuracy is the best-available—but inevitably imperfect—indicator of future accuracy.

Change between 2014 (baseline) and 2007 (follow-up) can be estimated for the nine non-relative poverty lines supported for the new 2014 scorecard.[36] The average absolute error across the nine estimates of change is about 2.5 percentage points (Table 9), while the average absolute change observed in the ECAM is about 8.5 percentage points. Thus, the average absolute error is about one-third of the average absolute observed change. This is not perfect, but it may be good enough for some purposes.

The worst performance is for 100% of the national line, with an error of +5.5 percentage points and an observed change in the ECAM of 2.4 percentage points. That is, the scorecard estimates an increase in poverty of about 7.9 percentage points from 2014 to 2007, about three times the increase observed in the ECAM.

For six of the nine lines, the observed value is in the estimate's 90-percent confidence interval (given $n = 1{,}024$). Of course, if scoring's assumptions held, then eight or nine of the nine 90-percent confidence intervals would contain the observed value.

[36] Change cannot be estimated for relative lines, as their real value is not constant over time. These are the five percentile-based lines and the line that marks the poorest half of people below 100% of the national line.

The estimated direction of change (that is, whether poverty increased or decreased) matches the observed direction of change for all nine lines. The estimated direction is also always "statistically significant" in that it matches the observed direction of change and in that zero is not in the estimate's 90-percent confidence interval (given $n = 1{,}024$). This is encouraging for the hope that the scorecard can usefully estimate change over time, but it is not a very difficult test. After all, most people on the street probably can also estimate changes of direction correctly. Still, it helps to know that the Cameroon scorecard got the direction of change right.

In sum, the scorecard always has the *sign* of change correct. The absolute error in the estimated *size* of change averages about one-third of the absolute change observed in the ECAM. Two-thirds of the observed changes in the ECAM are in the 90-percent confidence interval of the estimated changes. The scorecard is least-accurate for the most-important poverty line (the national line). Averaged across poverty lines, the confidence intervals are about 11-percent narrower than those of direct measurement. Compared with the other 14 countries with similar tests of accuracy for estimates of change over time (Schreiner, 2016, 2015a, 2015b, 2015c, 2015d, 2013b, 2013c, 2012c, 2010, 2009a, 2009b, 2009c; Schreiner and Woller (2010); and Chen and Schreiner, 2009), Cameroon's new 2014 scorecard is above-average (average absolute bias of 2.5 percentage points versus an average across countries of 3.0, and an average α of 0.89 versus 1.09). Of course, accuracy might be worse (or better) from now on in Cameroon.

Are these estimates of change for Cameroon "accurate enough"? The answer depends, of course, on the context and purpose of a given analysis task. Sometimes they will be adequate, sometimes not. While greater accuracy is always preferred and sought, a strength of the scorecard is that more is known about its accuracy than is known about the accuracy of alternatives, allowing for more-transparent and more-intentional judgments about how much trust to put in scoring's estimates.

7.4 Precision for estimates of change in two samples

For two equal-sized independent samples, the same logic as in the previous section can be used to derive a formula relating the confidence interval $\pm c$ with the standard error σ of a poverty-assessment tool's estimate of the change in poverty rates over time:

$$\pm\, c = \pm z \cdot \sigma = \pm z \cdot \alpha \cdot \sqrt{\frac{2 \cdot \hat{p} \cdot (1 - \hat{p})}{n}} \cdot \sqrt{\frac{N - n}{N - 1}}\,.$$

Here, z, c, $\hat{p}$ and N are defined as above, n is the sample size at both baseline and follow-up,[37] and α is the average (across a range of bootstrapped sample sizes) of the ratio of the observed confidence interval from a scorecard and the theoretical confidence interval under direct measurement.

[37] This means that—for a given level of precision—estimating the change in a poverty rate between two points in time requires four times as many total interviews (not twice as many) as does estimating a poverty rate at a point in time.

As before, the formula for standard errors can be rearranged to give a formula for sample sizes before indirect measurement via a poverty-assessment tool, where $\tilde{p}$ is based on previous measurements and is assumed equal at both baseline and follow-up: $n = 2 \cdot N \cdot \left(\frac{z^2 \cdot \alpha^2 \cdot \tilde{p} \cdot (1 - \tilde{p})}{z^2 \cdot \alpha^2 \cdot \tilde{p} \cdot (1 - \tilde{p}) + c^2 \cdot (N - 1)} \right)$. If ϕ can be taken as one, then the formula becomes $n = 2 \cdot \left(\frac{\alpha \cdot z}{c} \right)^2 \cdot \tilde{p} \cdot (1 - \tilde{p})$.

To illustrate the use of this formula to determine sample size for estimating changes in poverty rates across two independent samples, suppose the desired confidence level is 90 percent ($z = 1.64$), the desired confidence interval is ± 2 percentage points ($\pm c = \pm 0.02$), the poverty line is 100% of the national line, $\alpha = 0.94$ (Table 9), $\hat{p} = 0.267$ (the household-level poverty rate in 2014 for 100% of the national line in Table 1), and the population N is large enough relative to the expected sample size n that the finite population correction ϕ can be taken as one (1). Then the baseline sample size is $n = 2 \cdot \left(\frac{0.94 \cdot 1.64}{0.02} \right)^2 \cdot 0.267 \cdot (1 - 0.267) \cdot 1 = 2{,}326$, and the follow-up sample size is also 2,326.

7.5 Precision for estimated change for one sample, scored twice

Analogous to previous derivations, the general formula relating the confidence interval $\pm c$ to the standard error σ when using a scorecard to estimate change for a single group of households, all of whom are scored at two points in time, is:[38]

$$\pm c = \pm z \cdot \sigma = \pm z \cdot \alpha \cdot \sqrt{\frac{\hat{p}_{12} \cdot (1 - \hat{p}_{12}) + \hat{p}_{21} \cdot (1 - \hat{p}_{21}) + 2 \cdot \hat{p}_{12} \cdot \hat{p}_{21}}{n}} \cdot \sqrt{\frac{N - n}{n - 1}},$$

where z, c, α, N, and n are defined as usual, $\hat{p}_{12}$ is the share of all sampled households that move from below the poverty line to above it, and $\hat{p}_{21}$ is the share of all sampled households that move from above the line to below it. With the available data for Cameroon, it is not possible to estimate values of α here.

The formula for confidence intervals can be rearranged to give a formula for sample size before measurement. This requires an estimate (based on information available before measurement) of the expected shares of all households who cross the poverty line $\tilde{p}_{12}$ and $\tilde{p}_{21}$. Before measurement, a conservative assumption is that the change in the poverty rate will be zero, which implies $\tilde{p}_{12} = \tilde{p}_{21} = \tilde{p}_{*}$, giving:

$$n = 2 \cdot \left(\frac{\alpha \cdot z}{c} \right)^2 \cdot \tilde{p}_{*} \cdot \sqrt{\frac{N - n}{n - 1}}.$$

[38] See McNemar (1947) and Johnson (2007). John Pezzullo helped find this formula.

Because $\widetilde{p}_*$ could be anything between 0 and 0.5, more information is needed to apply this formula. Suppose that the observed relationship between $\widetilde{p}_*$, the number of years y between baseline and follow-up, and $p_{\text{pre-baseline}} \cdot \left(1 - p_{\text{pre-baseline}}\right)$ is—as in Peru (Schreiner, 2009d)—close to:

$$\widetilde{p}_* = -0.02 + 0.016 \cdot y + 0.47 \cdot \left[p_{\text{pre-baseline}} \cdot \left(1 - p_{\text{pre-baseline}}\right)\right].$$

Given this, a sample-size formula for a group of households to whom the new 2014 scorecard is applied twice (once after December 2014 and then again later) is

$$n = 2 \cdot \left(\frac{\alpha \cdot z}{c}\right)^2 \cdot \left[-0.02 + 0.016 \cdot y + 0.47 \cdot p_{\text{pre-baseline}} \cdot \left(1 - p_{\text{pre-baseline}}\right)\right] \cdot \sqrt{\frac{N - n}{n - 1}}.$$

In Peru (the only source of a data-based estimate, Schreiner, 2009d), the average α across years and poverty lines is about 1.30.

To illustrate the use of this formula, suppose the desired confidence level is 90 percent ($z = 1.64$), the desired confidence interval is ±2.0 percentage points ($\pm c = \pm 0.02$), the poverty line is 100% of the national line, the sample will first be scored in 2017 and then again in 2020 ($y = 3$), and the population N is so large relative to the expected sample size n that the finite population correction ϕ can be taken as one (1). The pre-baseline poverty rate p_{2017} is taken as 26.7 percent (Table 1), and α is assumed to be 1.30. Then the baseline sample size is

$n = 2 \cdot \left(\frac{1.30 \cdot 1.64}{0.02}\right)^2 \cdot \left[-0.02 + 0.016 \cdot 3 + 0.47 \cdot 0.267 \cdot \left(1 - 0.267\right)\right] \cdot 1 = 2{,}727$. The same group of 2,727 households is scored at follow-up as well.

8. Targeting

When a program uses scoring for segmenting clients for differentiated treatment (*targeting*), households with scores at or below a cut-off are labeled *targeted* and given one type of treatment by the program. Households with scores above a cut-off are labeled *non-targeted* and given another type of treatment.

There is a distinction between *targeting status* (scoring at or below a targeting cut-off) and *poverty status* (having consumption below a poverty line). Poverty status is a fact that is defined by whether consumption is below a poverty line as directly measured by a survey. In contrast, targeting status is a program's policy choice that depends on a cut-off and on an indirect estimate from a poverty-assessment tool.

Households who score at or below a given cut-off should be labeled as *targeted*,[39] not as *poor*. After all, unless all targeted households have poverty likelihoods of 100 percent, some of them are non-poor (their consumption is above a given poverty line). With scoring, the terms *poor* and *non-poor* have specific definitions. Using these same terms for targeting status is incorrect and misleading.

[39] Others labels are acceptable as long as they describe the segment and do not confuse targeting status (having a score below a program-selected cut-off) with poverty status (having consumption below an externally-defined poverty line). Examples of acceptable labels include *Groups A, B, and C*; *Households scoring 29 or less, 30 to 69, or 70 or more*; and *Households who qualify for reduced fees, or do not*.

Targeting is successful when households truly below a poverty line are targeted (*inclusion*) and when households truly above a poverty line are not targeted (*exclusion*). Of course, no poverty-assessment tool is perfect, and targeting is unsuccessful when households truly below a poverty line are not targeted (*undercoverage*) or when households truly above a poverty line are targeted (*leakage*).

Table 10 depicts these four possible targeting outcomes. Targeting accuracy varies by the cut-off score; a higher cut-off has better inclusion (but worse leakage), while a lower cut-off has better exclusion (but worse undercoverage).

Programs should weigh these trade-offs when setting a cut-off. A formal way to do this is to assign net benefits—based on a program's values and mission—to each of the four possible targeting outcomes and then to choose the cut-off that maximizes total net benefits (Adams and Hand, 2000; Hoadley and Oliver, 1998).

Table 11 shows the distribution of households by targeting outcome for Cameroon. For an example cut-off of 29 or less, outcomes for 100% of the national line in the 2014 validation sample are:

- Inclusion: 20.0 percent are below the line and correctly targeted
- Undercoverage: 6.7 percent are below the line and mistakenly not targeted
- Leakage: 8.8 percent are above the line and mistakenly targeted
- Exclusion: 64.6 percent are above the line and correctly not targeted

Increasing the cut-off to 34 or less improves inclusion and undercoverage but worsens leakage and exclusion:

- Inclusion: 22.7 percent are below the line and correctly targeted
- Undercoverage: 3.9 percent are below the line and mistakenly not targeted
- Leakage: 14.1 percent are above the line and mistakenly targeted
- Exclusion: 59.2 percent are above the line and correctly not targeted

Which cut-off is preferred depends on total net benefit. If each targeting outcome has a per-household benefit or cost, then total net benefit for a given cut-off is:

Benefit per household correctly included	x	Households correctly included	–
Cost per household mistakenly not covered	x	Households mistakenly not covered	–
Cost per household mistakenly leaked	x	Households mistakenly leaked	+
Benefit per household correctly excluded	x	Households correctly excluded.	

To set an optimal cut-off, a program would:

- Assign benefits and costs to possible outcomes, based on its values and mission
- Tally total net benefits for each cut-off using Table 11 for a given poverty line
- Select the cut-off with the highest total net benefit

The most difficult step is assigning benefits and costs to targeting outcomes. A program that uses targeting—with or without scoring—should thoughtfully consider how it values successful inclusion and exclusion versus errors of undercoverage and leakage. It is healthy to go through a process of thinking explicitly and intentionally about how possible targeting outcomes are valued.

A common choice of benefits and costs is the "hit rate", where total net benefit is the number of households correctly included or correctly excluded:

Hit rate =	1	x	Households correctly included	–
	0	x	Households mistakenly undercovered	–
	0	x	Households mistakenly leaked	+
	1	x	Households correctly excluded.	

Table 11 shows the hit rate for all cut-offs for the new 2014 scorecard. For 100% of the national line in the 2014 validation sample, total net benefit—under the hit rate—is greatest (84.5) for cut-offs of 29 or less or 24 or less, with about five in six households in Cameroon correctly classified.

The hit rate weighs successful inclusion of households below the line the same as successful exclusion of households above the line. If a program values inclusion more (say, twice as much) than exclusion, then it can reflect this by setting the benefit for inclusion to 2 and the benefit for exclusion to 1. Then the chosen cut-off will maximize (2 x Households correctly included) + (1 x Households correctly excluded).[40]

[40] Table 11 also reports BPAC, the Balanced Poverty Accuracy Criteria adopted by USAID for certifying poverty-assessment tools. IRIS Center (2005) made BPAC to consider accuracy in terms of the error of estimated poverty rates and in terms of targeting inclusion. BPAC = (Inclusion – |Undercoverage – Leakage|) x [100 ÷ (Inclusion + Undercoverage)]. Schreiner (2014b) explains why BPAC does not add any useful information beyond that provided by the more-standard measures used here.

As an alternative to assigning benefits and costs to targeting outcomes and then choosing a cut-off to maximize total net benefits, a program could set a cut-off to achieve a desired poverty rate among targeted households. The third column of Table 12 ("% targeted HHs who are poor") shows, for the new 2014 scorecard applied to the 2014 validation sample, the expected poverty rate among households who score at or below a given cut-off. For the example of 100% of the national line, targeting households in the 2014 validation sample who score 29 or less would target 28.8 percent of all households (second column) and would be associated with a poverty rate among those targeted of 69.3 percent (third column).

Table 12 also reports two other measures of targeting accuracy. The first is a version of coverage ("% poor HHs who are targeted"). For the example of 100% of the national line with the 2014 validation sample and a cut-off of 29 or less, 75.0 percent of all poor households are covered.

The final targeting measure in Table 12 is the number of successfully targeted poor households for each non-poor household mistakenly targeted (right-most column). For 100% of the national line with the 2014 validation sample and a cut-off of 29 or less, covering 2.3 poor households means leaking to 1 non-poor household.

9. Context of poverty-measurement tools in Cameroon

This section discusses three existing poverty-measurement tools for Cameroon in terms of their goals, methods, definitions of *poverty*, data, indicators, bias, precision, and cost. In general, the advantages of the scorecard are its:

- Using data from the most-recent nationally representative consumption survey
- Having fewer and lower-cost indicators
- Using a consumption-based definition of *poverty* that is widely understood and that is used by the government of Cameroon
- Reporting errors and precision for estimates of poverty rates at a point in time from out-of-sample tests, including formulas for standard errors
- Reporting errors and precision for estimates of changes in poverty rates over time from out-of-sample and out-of-time tests, including formulas for standard errors
- Reporting targeting accuracy, and having targeting accuracy that is likely similar to that of alternative approaches
- Being feasible for pro-poor programs in Cameroon, due to its low cost and transparency

9.1 Gwatkin *et al.*

Gwatkin *et al.* (2007) construct a poverty-assessment tool for Cameroon with an approach that they use in 56 countries with Demographic and Health Surveys (Rutstein and Johnson, 2004). They use Principal Component Analysis to make an asset index from low-cost indicators available for the 10,462 households in Cameroon's 2004 DHS.[41] The PCA index is like the scorecard here except that, because the DHS does not collect data on consumption, the index is based on a different conception of *poverty*, its accuracy vis-à-vis consumption-based poverty is unknown, and it can only be assumed to be a proxy for long-term wealth/economic status.[42] Well-known examples of the PCA asset-index approach include Stifel and Christiaensen (2007), Zeller *et al.* (2006), Sahn and Stifel (2003 and 2000), Henry *et al.* (2003), and Filmer and Pritchett (2001).

[41] All DHS data for Cameroon since 1991 include each household's asset-index score (`dhsprogram.com/topics/wealth-index/Wealth-Index-Construction.cfm`, retrieved 30 August 2016).

[42] Nevertheless, the indicators are similar and the "flat maximum" is important, so carefully built PCA indexes and consumption-based poverty-assessment tools may pick up the same underlying construct (perhaps "permanent income", see Bollen, Glanville, and Stecklov, 2007), and they may rank households much the same. Comparisons of rankings of households by PCA indexes, directly-measured consumption, and consumption-based scorecards include Filmer and Scott (2012), Howe *et al.* (2009), Lindelow (2006), Sahn and Stifel (2003 and 2000), Wagstaff and Watanabe (2003), and Montgomery *et al.* (2000).

The 17 indicators in Gwatkin *et al.* are similar to those in the scorecard in terms of their low cost and verifiability:

- Characteristics of the residence:
  - Type of floor
  - Presence of electricity
  - Type of cooking fuel
  - Source of drinking water
  - Type of toilet arrangement
  - Number of household members per sleeping room
- Whether the household has a domestic worker not related to the head
- Ownership of consumer durables:
  - Radios
  - Televisions
  - Land-line telephones
  - Mobile telephones
  - Electric or gas stoves
  - Refrigerators
  - Bicycles
  - Motorcycles/scooters
  - Cars/trucks
- Whether members of the household work their own or family's agricultural land

Gwatkin *et al.* suggest three possible uses for their index:

- Segmenting households by the quintile of their index to see how health varies with socio-economic status
- Monitoring (via exit surveys) how well local health-service posts reach the poor
- Measuring local coverage of health services via small-scale surveys

The first goal is segmentation, and the last two goals deal with performance monitoring, so the asset index would be used much like the scorecard here. In particular, the scorecard's support for relative (percentile-based) poverty lines allows the segmentation of households by quintile to see how health (or other things) vary with

consumption. Of course, it is also possible to segment households by quintiles based on scores from the scorecard to see how health (or other things) vary with wealth.

The Gwatkin *et al.* index is more costly and difficult-to-use than the scorecard. The index has 17 indicators (versus 10), and while the scorecard requires adding up 10 integers (some of them usually zeroes), Gwatkin *et al.*'s index requires adding up 79 numbers, each with five decimal places and about half with negative signs.

A strength of asset indexes is that, because they do not require consumption data, they can be constructed from data from a wide array of "light" surveys such as censuses, Demographic and Health Surveys, Welfare Monitoring Surveys, and Core Welfare Indicator Questionnaires. In comparison, the scorecard is linked directly to a consumption-based poverty line. Thus, while both approaches can rank households, only the scorecard can estimate consumption-based poverty status. Like an asset index, the scorecard can be applied to data from a "light" survey that does not collect consumption as long as the "light" survey collects indicators that match those in the scorecard (Schreiner, 2011).

In essence, Gwatkin *et al.*—like all asset indexes—define *poverty* in terms of the indicators and points in the index itself. Thus, the index is not a proxy standing in for something else (such as consumption). Rather, it is a direct measure of a non-consumption-based definition of *poverty*. There is nothing wrong—and a lot right—about defining *poverty* in this way, but it is not as common as a consumption-based

definition. It also means that ranks are not comparable across different asset indexes because the definition of *poverty* varies with a given index's indicators and points.

In general, the asset-based approach defines people as *poor* if their assets (physical, human, financial, and social) fall below a threshold. Arguments for an asset-based view of development include Carter and Barrett (2006), Schreiner and Sherraden (2006), Sahn and Stifel (2003), and Sherraden (1991). The main advantages of the asset-based view are that:

- Asset ownership is easier to measure accurately than consumption
- Access to resources in the long term—and thus capacity to produce income and to consume—depends on the control of assets
- Assets get at capability more directly, the difference between, say, "Would income allow for adequate sanitation?" versus "Does the toilet drain to a septic tank?"

While the asset view and the income/consumption view are distinct, they are also tightly linked. After all, income and consumption are flows of resources received/consumed from the use of stocks of assets. Both views are low-dimensional simplifications—due to practical limits on definitions and measurement—of a higher-dimensional and more complete conception of the production of human well-being.

9.2 Sahn and Stifel (2000)

Sahn and Stifel (2000) use factor analysis (a close relative of PCA that gives similar results) to construct an asset index meant to measure poverty in terms of long-term wealth. Their purpose relates to assessment (to inform governments and donors about the broad progress of poverty-reduction efforts in Africa) rather than operations (to provide a tool to help local, pro-poor programs improve the management of their social performance).

Sahn and Stifel construct an index by pooling data from Cameroon's 1991 and 1997 DHS. Defining poverty status according to lines set at the 25^{th} and 40^{th} percentiles of scores from the index, they then compare the distribution of the index and poverty rates over time (within Cameroon) and across countries (Cameroon and 10 other sub-Saharan countries).

Sahn and Stifel also construct a single index from pooled DHS data from 11 sub-Saharan countries—including Cameroon—with two DHS rounds, along with five other sub-Saharan countries with only a single DHS round. Because each DHS in each country collects a common set of indicators, this elegantly allows Sahn and Stifel to compare asset-based poverty across time (within a country) and across countries[43] based on a single index with a definition of *poverty* that—unlike a consumption-based definition—is measured consistently across time and countries.

[43] Their ranking ignores that the time between the two DHS surveys varies by country.

The eight indicators in Sahn and Stifel are similar to those in Gwatkin *et al.* and in the scorecard in terms of their low cost and verifiability:

- Education of the head
- Characteristics of the residence:
  - Type of floor
  - Source of drinking water
  - Type of toilet arrangement
- Ownership of consumer durables:
  - Radio
  - Television
  - Refrigerator
  - Motorized transport

Like Gwatkin *et al.*, Sahn and Stifel shares many of the strengths of the approach here in that it can be used for targeting and in that it is flexible, low-cost, and adaptable to diverse contexts. Because an asset index does not require price adjustments over time nor between countries—and because it does not require any consumption data at all—it is more adaptable in these ways than the scorecard.

Sahn and Stifel also share with Gwatkin *et al.* the disadvantages of using a less-common definition of *poverty* and of not reporting standard errors.

9.3 Stoeffler, Nguetse-Tegoum, and Mills

Stoeffler, Nguetse-Tegoum, and Mills (2015) construct a poverty-assessment tool as an "improved mechanism for targeting assistance to poor and vulnerable households" in Cameroon (p. 39). Their "proxy-means test" seeks to use a limited number of verifiable indicators and so is like a scorecard, although it is only labeled for use in targeting.

Stoeffler, Nguetse-Tegoum, and Mills make urban and rural poverty-assessment tools. The rural tool uses ordinary-least squares regression to estimate aggregate household per-adult-equivalent consumption, conditional on the household's response to indicators. The urban tool uses quantile regression to estimate the 10^{th} percentile of consumption, conditional on the household's responses. Their goal is to "target only the chronically poor" (p. 47), defined as people with consumption below 80% percent of the national line (XAF533 per adult equivalent per day in prices in Yaoundé in the fourth quarter of 2007).

The rural tool has 25 indicators:[44]

- Household demographics:
  - Number of household members
  - Number of household members in an age range:
    - 0 to 4
    - 5 to 14
    - 15 to 59
    - 60 or more
  - Characteristics of the head of the household:
    - Sex
    - Age
    - Marital status
    - Religion
- Education of the head of the household
- Occupation of the head of the household
- Characteristics of the residence:
  - Type of floor
  - Type of roof
  - Area of the residence in meters-squared
  - Type of energy used for lighting
  - Type of fuel used for cooking
  - Type of toilet arrangement
- Asset ownership:
  - Residence that is not used by a household member
  - Non-agricultural land
  - Radio
  - Television
  - Cable-television subscription or satellite dish
  - Refrigerator
  - Motorcycle
  - Cart

[44] The urban tool has most of the indicators in the rural tool, along with: type of residence; tenancy status in the residence; source of drinking water; type of wall; and ownership of a telephone (mobile or land-line), compact disk or DVD player, refrigerator, fan or air-conditioning unit, stove, motorcycle or bicycle, and set of living-room or dining-room furniture.

All these indicators—like those in the scorecard—have categorical responses, and each response is associated with integer points (although some points in Stoeffler, Nguetse-Tegoum, and Mills are negative). Unlike the scorecard, the sum of a household's points (plus a constant term) is an estimate of its monthly per-adult-equivalent consumption. This is compared to a cut-off to determine targeting status.

Stoeffler, Nguetse-Tegoum, and Mills have more indicators (25 for rural, 32 for urban) than the scorecard (10 for all of Cameroon). Two of their indicators—religion of the household head, and the area of the residence in meters-squared—may be difficult or sensitive to collect.

Which poverty-assessment tool targets better? Stoeffler, Nguetse-Tegoum, and Mills report exclusion error and inclusion error[45] for their tools applied out-of-sample with one-third of the 2007 ECAM. While the targeting accuracy of the new 2014 scorecard can likewise be tested out-of-sample (and out-of-time) with the 2007 ECAM, it has not been done, as a somewhat apples-to-apples accuracy comparison still would not be possible because Stoeffler, Nguetse-Tegoum, and Mills do not report the share of urban and rural people targeted.

[45] *Exclusion error* is the number of poor households who are mistakenly not targeted, divided by the number of poor households. *Inclusion error* is the number of non-poor households who are mistakenly targeted, divided by the number of households targeted.

10. Conclusion

Pro-poor programs in Cameroon can use the scorecard to segment clients for differentiated treatment as well as to estimate:

- The likelihood that a household has consumption below a given poverty line
- The poverty rate of a population at a point in time
- The change in the poverty rate of a population over time

The scorecard is inexpensive to use and can be understood by non-specialists. It is designed to be practical for pro-poor programs in Cameroon that want to improve how they monitor and manage their social performance.

The new 2014 scorecard is constructed with data from half of the households in Cameroon's 2014 ECAM. Those households' scores are then calibrated to poverty likelihoods for 15 poverty lines. The accuracy (errors and precision) of the new 2014 scorecard is tested out-of-sample on data that is not used in scorecard construction for targeting, for household's poverty likelihoods at a point in time, and for estimates of a population's poverty rates a point in time.

The accuracy of estimates for changes in poverty rates over time is tested out-of-sample and out-of-time. Of course, the scorecard's estimates of change are not necessarily the same as estimates of program impact. Legacy users of Cameroon's old 2007 scorecard can switch to the new 2014 scorecard without having to start over from scratch when measuring change in poverty rates over time.

When the scorecard is applied to the 15 poverty lines in the 2014 validation sample, the maximum absolute error for point-in-time estimates of poverty rates is 2.0

percentage points, and the average absolute error is about 1.1 percentage points. Corrected estimates may be had by subtracting the known error for a given poverty line from original, uncorrected estimates.

For $n = 16{,}384$ and 90-percent confidence, the precision of point-in-time estimates of poverty rates is ± 0.5 percentage points or better. With $n = 1{,}024$, the 90-percent confidence intervals are ± 1.9 percentage points or better.

Accuracy is also reported for estimates of changes in poverty rates over time. Across 1,000 bootstraps with $n = 16{,}384$, the average absolute error across the nine absolute (non-relative) poverty lines is about 2.5 percentage points. The average absolute observed change is about 8.5 percentage points, so the average absolute error is about one-third of the average absolute observed change.

On average, the 90-percent confidence intervals for scoring's estimates of change are about 11-percent narrower than those under direct measurement. The 90-percent confidence interval (with $n = 1{,}024$) of the estimated change includes the observed value for six of nine poverty lines. The estimated direction is both correct and "statistically significant" (the confidence interval excludes zero) for all nine lines. Are these estimates of change accurate enough? The answer naturally depends on the accuracy required for a given purpose and context. A strength of the scorecard is that its accuracy and precision is documented to the extent possible.

If a program wants to use the scorecard for segmenting clients for differentiated treatment, then the results here provide useful information for selecting a targeting cut-off that fits its values and mission.

Although the statistical technique is innovative, and although technical accuracy is important, the design of the scorecard focuses on transparency and ease-of-use. After all, accuracy is irrelevant if an organization's managers feel so daunted by a scorecard's complexity or its cost that they do not even try to use it.

For this reason, the scorecard uses 10 indicators that are straightforward, low-cost, and verifiable. Points are all zeros or positive integers, and scores range from 0 (most likely below a poverty line) to 100 (least likely below a poverty line). Scores are converted to poverty likelihoods via look-up tables, and targeting cut-offs are likewise straightforward to apply. The design attempts to facilitate voluntary adoption by helping managers to understand and to trust scoring and by allowing non-specialists to add up scores quickly in the field.

In summary, the scorecard is a practical, objective way for pro-poor programs in Cameroon to estimate consumption-based poverty rates, track changes in poverty rates over time, and segment participants for differentiated treatment. The same approach can be applied to any country with similar data.

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Guidelines for the Interpretation of Scorecard Indicators

The excerpts quoted below come from:

Institut National de la Statistique. (2013) "Quatrième Enquête Camerounaise Auprès des Ménages (ECAM4) : Manuel de l'Agent Enquêteur", [the *Manual*], `slmp-550-104.slc.westdc.net/~stat54/nada/index.php/catalog/43/download/430`, retrieved 30 August 2016.

Interview Procedure

Fill out the scorecard header and the "Back-page Worksheet" first, following the directions on the "Back-page Worksheet".

In the scorecard header, fill in the number of household members based on the list you compile as part of the "Back-page Worksheet".

Do not ask the first scorecard indicator directly ("How many members does the household have?"). Instead, fill in the appropriate response based on the total number of household members that you list on the "Back-page Worksheet".

Ask all of the other scorecard questions directly of the respondent, except for the third question ("What is the main material of the floor of the residence?").

General Interviewing Advice

Study these "Guidelines" carefully, and carry them with you while you work.

According to p. 12 of the *Manual*, "Refer to these 'Guidelines' and to your supervisor for any technical questions. These 'Guidelines' are your main source of guidance for the survey, and you should always carry this *Manual* with you while interviewing."

Remember that the respondent need not be the same person as the household member who is a participant with your organization.

Read each question word-for-word, in the order presented in the scorecard.

According to p. 51 of the *Manual*, "[The third question ('What is the main material of the floor of the residence?')] should be recorded based on what you as the enumerator can observe without actually asking the question of the respondent. If you cannot determine the appropriate response with a high degree of certainty based on your own observation, then you should go ahead and ask the question of the respondent." All of the other nine scorecard questions should be asked of the respondent.

When an issue arises that is not addressed here, its resolution should be left to the unaided judgment of the enumerator, as that apparently was the practice of Cameroon's *Institut National de la Statistique* in the 2014 ECAM. That is, an organization using the scorecard should not promulgate any definitions or rules (other than those in these "Guidelines") to be used by all its field agents. Anything not explicitly addressed in these "Guidelines" is to be left to the unaided judgment of each individual enumerator.

Do not read the response options to the respondent. Simply read the question, and then stop; wait for a response. If the respondent asks for clarification or otherwise hesitates or seems confused, then read the question again or provide additional assistance based on these "Guidelines" or as you, the enumerator, deem appropriate.

In general, you should accept the responses given by the respondent. Nevertheless, if the respondent says something—or if you see or sense something—that suggests that the response may not be accurate, that the respondent is uncertain, or that the respondent desires assistance in figuring out how to respond, then you should read the question again and provide whatever help you deem appropriate based on these "Guidelines".

While most indicators in the scorecard are verifiable, you do not—in general—need to verify responses. You should verify a response only if something suggests to you that the response may not be accurate and thus that verification might improve data quality. For example, you might choose to verify if the respondent hesitates, seems nervous, or otherwise gives signals that he/she may be lying or be confused. Likewise, verification is probably appropriate if a child in the household or a neighbor says something that does not square with the respondent's answer. Verification is also a good idea if you can see something yourself—such as a consumer durable that the respondent avers not to possess, or a child eating in the room who has not been counted as a member of the household—that suggests that the response may not be accurate.

In general, the application of the scorecard should mimic as closely as possible the application of the 2014 ECAM by Cameroon's *Institut National de la Statistique*. For example, poverty-scoring interviews should take place in respondents' homesteads because the 2014 ECAM took place in respondents' homesteads.

According to p. 3 of the *Manual*, "The success of the survey depends on you, on how you administer the questionnaire, and on how you treat respondents.

"Follow all the guidelines here scrupulously [including this one]. . . . They encapsulate lessons learned over many years.

"Explain to respondents why you are doing the survey in simple terms [(your organization would like to understand better how its participants live).] Do not get involved in a household's internal issues, and do not broach subjects that might detract from the purpose of the survey."

Questionnaire Translation

These "Guidelines"—and this document in general—currently exist in only in English and French; there is not yet an official, standard translation of the scorecard, "Back-page Worksheet", "Guidelines", and tables to other local languages in use in Cameroon. Users can check `SimplePovertyScorecard.com` to see if other translations have been done since this writing.

Until there is an official, standard translation to a given local language, users should contact the author for help in creating such a translation. In particular, the translation of scorecard indicators should follow as closely as possible the meaning of the original French or English wording in the two official versions of the 2014 ECAM *Questionnaire*. The *Enumerator Manual* for the 2014 ECAM was written in French (but not also in English), so these "Guidelines" must be translated from the *Manual*'s original French.

Who should be the respondent?

According to p. 16 of the *Manual*, the preferred respondent "is the head of the household. If he/she is not available, then the next-preferred respondent is the spouse of the head of the household. In the absence of both the head and his/her spouse, the scorecard may be administered to any other adult who can provide the required information."

Remember that the respondent need not be the same person as the household member who is a participant with your organization.

Enumerator responsabilities

If a situation arises for which these "Guidelines" are silent, incomplete, or contradictory, then you should rely solely on your own judgment. In particular, your organization should not promulgate any rules nor teach any practices to you or your fellow enumerators concerning how to ask questions and interpret responses for the scorecard other than those included in these "Guidelines".

Advice for conducting the interview

According to p. 11 of the *Manual*:

Be neutral

"Be completely neutral throughout the entire interview. Do not do anything that might lead the respondent to feel that he/she has given a 'correct' or 'incorrect' response, whether by your tone of voice, facial expression, or body language. Never give the impression that you approve or disapprove of anything that the respondent says.

Do not suggest answers to the respondent

Do not change the meaning of questions nor their sequencing

"If the respondent has misunderstood a question, then repeat it, slowly and clearly. If the respondent still does not understand, then reword the question, being careful not to change the original meaning. . . .

Be tactful with reluctant respondents

"If the respondent seems uninterested, distracted, refuses to answer some questions, or wants to discontinue the interview, then try to do something to revive his/her interest. For example, take a few minutes to chat about things unrelated to the survey, such as sports, the village, the weather, and so on.

Avoid preconceived notions of what responses should be

Do not rush the interview

"Ask questions slowly so that the respondent understands what is being asked. After asking a question, wait: give the respondent time to think. If the respondent feels hurried, then he/she may give sloppy or frivolous answers, or just say, 'I don't know'. If you suspect that the respondent feels pressured to answer quickly, then gently remind him/her, 'There is no rush. Your opinion is very important, so please think about your answers carefully. I am happy to take all the time that you need.'

Language of the interview

"[The scorecard] has official translations in French and English. Use the respondent's preferred language from among these two. If the respondent does not speak French nor English, then translate (or find someone to translate) the questions, being careful not to change their original meaning."

How to establish a healthy rapport with the respondent

According to pp. 11–12 of the *Manual*:

Make a good first impression

"When you first meet the respondent, do your best to put him/her at ease. Try to make him/her comfortable and thus more likely to respond favorably to your request to be interviewed. Smile, and introduce yourself.

"After exchanging the customary greetings (such as 'Good morning, Sir', or 'Good morning, Ma'am'), introduce yourself as follows: 'My name is [your name]. I am doing a survey for [your organization]. The purpose of the survey is to better understand the lives of [the participants of your organization]. Your household has been chosen at random to be in the survey, and I would appreciate your cooperation.'

Be positive

"Be calm and polite. Do not make excuses or act ashamed. Avoid saying things like 'Are you very busy?', 'Could you give me a few minutes?', or 'I am sorry to bother you, but could I impose on you to answer a few questions for me?' These types of questions run the risk of encouraging the respondent to refuse to cooperate even before the interview starts. Tell the respondent instead, 'I would like to ask you a few questions', or 'I would like to speak with you for a few minutes.'

If necessary, assure the respondent that all responses will be kept strictly confidential

"If some questions cause the respondent to hesitate, then tell him/her that all the data collected by the survey will be kept strictly confidential, that it will be used only for statistical purposes, and that no report will ever mention the names of specific people nor associate responses with any specific household. Assure him/her that you are strictly prohibited from sharing the responses with anyone who is not authorized.

Respond frankly to all of the respondent's questions

"If the respondent asks questions about the survey or about the length of the interview, then patiently and cheerfully give him/her a clear answer. Always carry your organizational identity card and your letter of introduction, and show these to the respondent if it seems called for."

Show that you take your work seriously and that you respect respondents' time by being on-time for your appointments"

Guidelines for specific scorecard indicators

1. How many members does the household have?
    A. Eight or more
    B. Seven
    C. Six
    D. Five
    E. Four
    F. Three
    G. Two
    H. One

Do not ask this question directly of the respondent. Instead, mark the response based on the information your gather about household members on the "Back-page Worksheet".

According to pp. 6 and 16 of the *Manual*, a *household* "is a socio-economic unit of one or more people—regardless of blood or marital relationship—who live together in a single residence consisting of one or more buildings in the same compound, who share all or some resources to provide for their basic needs, who usually eat meals together, and who recognize the authority of a single head."

According to page 16 of the *Manual*, "Do not confuse a *household* with a *family*. Even though all members of a family are related, they may not all be members of the same household because they may live in different compounds, they may not share resources for providing for their basic needs, they may not usually eat together, or they may not recognize the same head.

"Four criteria determine whether a given person is a *member of a household*:

- Lives with the household in the same residence (hut, house, apartment, compound/*saré*, and so on)
- Eats with the household at some point in the day
- Shares resources (partly or completely) with the household. The resources that come from a given household member benefit all the members of the household to some extent
- Recognizes of the authority of the head of the household. That recognition may be tacit or implicit. When in doubt, count the oldest member as the head

"A person who meets only one, two, or three of the four criteria does not qualify as a *member of the household*. The examples below show cases that do not qualify:

- A lodger lives in the same compound with his/her landlord but generally makes independent decisions. This lodger is not part of the landlord's household. This holds even if the lodger is sometimes invited to share a meal with the landlord's household or if the lodger usually pays to eat with the landlord's household
- An indigent neighbor (widow, invalid, unemployed person, and so on) may regularly be invited to eat with a household (or may receive food sent by the household). Nevertheless, the indigent neighbor is not a member of the household. Even though the household helps such an indigent neighbor, it is not responsible for his/her well-being
- A husband has been working in another country for more than six months. He is no longer counted as a household member. Likewise, a child who been away at college for more than six months is no longer a household member"

There is also a fifth criteria that must be met. According to p. 17 of the *Manual*, "The concept of *household membership* depends on being a usual resident in the residence of the household as well as the duration (or expected duration) of residence with the household as of the day of the interview.

"To count as a *member of the household*, a person must have lived there for at least six months (or intends to stay for a total of at least six months, as is the case after moving and for newly-weds or newborns).

"A usual resident may or may not have spent the night in the residence of the household on the day of the interview. But to count as a *household member*, the absence (or expected absence) must not exceed six months."

According to p. 61 of the *Manual*, "A *household member* is anyone who *normally* lives with the household, that is, anyone who has lived with the household for at least six months or who currently lives with the household and intends to stay for [a total duration of] at least six months."

Finally, a given person must be a member of one household, and that person cannot be a member of more than one household. This is especially relevant in polygamous marriages in which one or more wives—according to the five criteria above—have separate households. In such cases, the husband is a member of one (and only one) of the households. A wife in a household in which the husband is not a member is counted as the head of that household.

2. Does the (oldest) female head/spouse know how to read and write a simple sentence in French or English?
    A. No
    B. Only English
    C. No female head/spouse
    D. Only French, or French and French

According to p. 28 of the *Manual*, "A *simple sentence* is defined as a complete sentence with a subject, verb, and object."

This question concerns literacy only in French and English. It does not concern literacy in Arabic nor in any of the local languages of Cameroon. For example, if someone can read and write a simple sentence in English and in Arabic but not in any other languages (and in particular, not in French), then mark "B. Only English". Likewise, if a person can read and write a simple sentence only in a local language, then mark "A. No".

Remember that you already know the name of the (oldest) female head/spouse (and whether she exists) from the notes you took for your own use while compiling the "Back-page Worksheet". Thus, if there is a female head/spouse, do not mechanically ask, "Does the (oldest) female head/spouse know how to read and write a simple sentence in French or English?". Instead, use the actual name of the female head/spouse, for example: "Does Marie know how to read and write a simple sentence in French or English?" If there is no female head/spouse, then do not read the question at all; just mark "C. No female head/spouse" and proceed to the next indicator.

For the purposes of the scorecard, the *(oldest) female head/spouse* is defined as:

- The household head, if the head is female
- The (oldest) spouse/conjugal partner of the household head, if the head is male
- Non-existent, if the head is male and if he does not have a spouse/conjugal partner who is a member of the interviewed household

According to p. 16 of the *Manual*, the *head of the household* is whomever is recognized as such by the other household members. This recognition is often tacit/implicit. When in doubt, count the oldest member as the head.

3. What is the main material of the floor of the residence?
    A. Dirt
    B. Cement, wood, or other
    C. Tile/marble

According to p. 51 of the *Manual*, "In most cases, the response to this particular question should be recorded based on what you as the enumerator can observe of the floor of the residence, without actually asking the question of the respondent. If you cannot determine with a high degree of certainty the main material of the floor based on your own observation, then you should go ahead and ask the question of the respondent."

According to p. 51 of the *Manual*, "Record the main material of the floor, that is, the predominant type of material or that material which accounts for the highest share of the floor of the residence."

According to p. 58 of the *Manual*, "Observe the main type of material of the floor, and mark the corresponding response option. If there are multiple types of materials, then ask the respondent which is the main one, that is, the one that accounts for the largest quantity."

4. What type of toilet arrangement does the household use?
    A. None/bush/field, bucket, latrine over water, composting toilet, or other
    B. Pit latrine without a slab/open pit
    C. Pit latrine with a slab, improved ventilated pit latrine, or flush toilet (with or without a water tank)

According to p. 51 of the *Manual*, "Record the main type of toilet arrangement used by the household, that is, the predominant arrangement or that which accounts for the highest share of usage."

According to pp. 57–58 of the *Manual*, "If the household uses more than one type of toilet arrangement, and if you as the enumerator together with the respondent cannot determine which is the main type, then you should mark the response that corresponds to the most comfortable type that the household uses.

"It may be necessary to take a look at the toilet arrangement yourself. In that case, be sure to ask politely for permission first.

"If the respondent tells you that the members of the household do not use any toilet arrangement but rather go in the fields or bushes, then mark 'A. None/bush/field, bucket, latrine over water, composting toilet, or other'

"The different types of toilet arrangements are defined as follows:

- *None/bush/field*: This includes the practice of bagging excrement and throwing it in a trash receptacle, the 'cat' method in which excrement is buried in shallow holes in the forest or in fields, and defecation directly into a body of water (such as a drainage canal, beach, river, waterway, or ocean)"
- *Bucket* : This refers to a bucket or other receptacle used to collect excrement (including urine and toilet paper) that is then dumped
- *Latrine over water*: This is a toilet made to hang over a body of water (such as a river) into which the excrement falls
- *Composting toilet*: This type of toilet combines human excrement with other organic materials (such as as vegetable scraps, crop residues, straw, sawdust, and ashes) under specific conditions to produce a fertilizer that does not pose any health risk to humans
- *Other*: Mark this as the response when the type of toilet arrangement used by the household does not fall into any of the other offered options
- *Pit latrine without a slab/open pit*: This type of latrine is a hole dug in the ground to collect human waste. It does not have a slab nor platform with a seat. It is simply a hole that is dug for the purpose of collecting excrement

- *Pit latrine with a slab*: This type of pit latrine has a slab or platform with a seat (made of cement, steel, or wood so the user can safely and comfortably sit) that is firmly supported on the ground above the pit on all sides. The slab, platform, or seat can be cleaned, and it is built up higher than the surrounding ground level so that surface water does not run into the pit. The pit is completely covered by the slab or platform upon which the user sits or squats. The slab or platform may be made of any type of material (cement, concrete, wood chinked with clay or mud, and so on) as long as it completely covers the pit (other than the hole over which the user sits or squats)
- *Improved ventilated pit latrine*: This type of pit latrine vents the pit by means of a pipe that extends from the pit through the roof of the structure. The open top of the vent has a mesh or screen that prevents flies from getting into the pit
- *Flush toilet (with or without a water tank)*: A flush toilet uses water (from a tank, or poured in by hand with each flush) to flush away waste. The toilet itself has a water seal formed by a swan-necked tube under/behind the toilet seat or squatting pan that prevents flies from getting in and foul odors from getting out

5. What is the main type of fuel used by the household for cooking?
    A. Collected or gifted firewood
    B. Kerosene
    C. Purchased firewood
    D. Charcoal, electricity, sawdust/wood chips, does not cook, or other
    E. Gas (butane or propane)

According to p. 51 of the *Manual*, "Record the main type of fuel used by the household for cooking, that is, the type of fuel used most often or that which accounts for the highest share of usage."

According to p. 57 of the *Manual*, « This question concerns fuel used for cooking, not fuel used for heating nor fuel used for lighting.

"If the household uses more than one type of fuel for cooking, then try to determine which type is used most often. If you and the respondent cannot determine which one is used most often, then record the type of fuel that is the most convenient for the household to use.

"For example, if a household normally uses gas (butane or propane) but, being out of cash, currently uses some other fuel temporarily—for example, kerosene—then the main type of cooking fuel should be recorded as 'E. Gas (butane or propane)'."

6. Does the household have an electric iron?
    A. No
    B. Yes

According to p. 59 of the *Manual*, "A household is considered to have an electric iron if its possession in non-precarious (having lasted for at least six months or being expected to last for a total duration of at least six months), regardless of when or how the electric iron was acquired.

Examples of such non-precarious tenure in the absence of ownership are:

- Three years ago, a household received an electric iron for safekeeping when a friend moved away. While the electric iron is in safekeeping, the true, original owner does not enjoy its services, and the interviewed household uses it to press its clothes. Thus, for the purposes of this question, the original owner does not possess the electric iron, and the interviewed household does possess it
- A high-level executive with a large private company has the use of, for example, a business vehicle. The executive is counted as possessing the vehicle

"Do not count electric irons that are usually used to produce goods or services for sale (for example, an electric iron that a household uses mainly to press clothes that it has taken in from other households to be washed and ironed). These are business assets, not household assets.

"Likewise, do not count electric irons that do not work, are indefinitely out-of-order, and have zero residual value. An example is a broken electric iron that has been put in storage and will never be used again."

"The question is concerned with electric irons of any kind, regardless of the model, brand, age, price, size, and so on."

7. Does the household have a television set?
    A. No
    B. Yes

According to p. 59 of the *Manual*, "A household is considered to have a television set if its possession in non-precarious (having lasted for at least six months or being expected to last for a total duration of at least six months), regardless of when or how the television set was acquired.

Examples of such non-precarious tenure in the absence of ownership are:

- Three years ago, a household received a television set for safekeeping when a friend moved away. While the television set is in safekeeping, the true, original owner does not enjoy its services, and the interviewed household uses it for its own entertainment. Thus, for the purposes of this question, the original owner does not possess the television set, and the interviewed household does possess it
- A high-level executive with a large private company has the use of, for example, a business vehicle. The executive is counted as possessing the vehicle

"Do not count television sets that are usually used to produce goods or services for sale (for example, a television that a household uses mainly to entertain diners in a restaurant that the household owns). These are business assets, not household assets.

"Likewise, do not count television sets that do not work, are indefinitely out-of-order, and have zero residual value. An example is a broken television set that has been put in storage and will never be used again."

"The question is concerned with television sets of any kind, regardless of the model, brand, age, price, size, and so on."

8. Does the household have a radio or a hi-fi stereo system?
    A. No
    B. Only radio
    C. Hi-fi stereo (regardless of radio)

According to p. 59 of the *Manual*, "A household is considered to have a radio or a hi-fi stereo system if its possession in non-precarious (having lasted for at least six months or being expected to last for a total duration of at least six months), regardless of when or how the radio or hi-fi stereo system was acquired.

Examples of such non-precarious tenure in the absence of ownership are:

- Three years ago, a household received a radio or a hi-fi stereo system for safekeeping when a friend moved away. While the radio or hi-fi stereo system is in safekeeping, the true, original owner does not enjoy its services, and the interviewed household uses it for its own entertainment. Thus, for the purposes of this question, the original owner does not possess the radio or hi-fi stereo system, and the interviewed household does possess it
- A high-level executive with a large private company has the use of, for example, a business vehicle. The executive is counted as possessing the vehicle

"Do not count radios nor hi-fi stereo systems that are usually used to produce goods or services for sale (for example, a radio or a hi-fi stereo system that a household uses in a discotheque that the household owns). These are business assets, not household assets.

"Likewise, do not count radios nor hi-fi stereo systems that do not work, are indefinitely out-of-order, and have zero residual value. An example is a broken radio or hi-fi stereo system that has been put in storage and will never be used again."

"The question is concerned with radios or hi-fi stereo systems of any kind, regardless of the model, brand, age, price, size, and so on."

"The main purpose of the asset is the one that is to be considered for the purposes of this question. For example, if a household possesses a mobile phone that also provides the option of listening to radio stations, the household is to be considered as possessing a mobile phone and not as also possessing a radio.

Ask one question for each of the two items:

- Does the household have a radio?
- Does the household have a hi-fi stereo system?

Mark the responses as follows:

Does the household have a . . . ?		**Response to be marked**
Radio	**Hi-fi stereo system**	
No	No	A. None
Yes	No	B. Radio only
No	Yes	C. Hi-fi stereo system (regardless of radio)
Yes	Yes	C. Hi-fi stereo system (regardless of radio)

9. Does the household currently possess any cupboards, chests of drawers, or wardrobes?
    A. No
    B. Yes

According to p. 73 of the *Manual*, "The concept of possession of a cupboard, chest of drawers, or a wardrobe depends—for the purposes of this question—on proprietorship (regardless of formal title) rather than on current usage (as was the case for other assets [asked about by the scorecard, and in particular electric irons, televisions, radios, hi-fi stereo systems, and mobile phones]).

"For the purposes of this question about cupboards, chests of drawers, or wardrobes, a household is said to possess the asset if it owns the asset, regardless of whether the household itself uses the asset.

"To qualify, the asset must be in working order or temporarily out-of-order (that is, there are plans to have the asset repaired and back in working condition within six months from the time when it stopped working).

"For the purposes of this question, possession does not depend on whether the asset is used by the household, by an enterprise run by the household, or by both. To illustrate:

- A household that uses a cupboard, chest of drawers, or wardrobe that belongs to the boss of the head of the household is not considered to possess the asset under consideration. The cupboard, chest of drawers, or wardrobe is an asset owned (and possessed) by the boss who has allowed the household head to use it
- A household that received for safekeeping a cupboard, chest of drawers, or wardrobe from a neighboring household upon its moving away from the village two years ago. The household currently uses the asset in its personal or business activities. Nevertheless, the household is not considered—for the purposes of this question—to possess the cupboard, chest of drawers, or wardrobe. Instead, the asset has been (and still is) the property of (and possessed by) the formerly neighboring household that has moved away"

According to p. 76 of the *Manual*, "Do not count cupboards, chests of drawers, or wardrobes that do not work, are indefinitely out-of-order, and have zero residual value. An example is a broken wardrobe that has been put in storage and will never be used again."

10. How many mobile phones does the household have?
    A. None
    B. One
    C. Two
    D. Three or more

According to p. 59 of the *Manual*, "A household is considered to have a mobile phone if its possession in non-precarious (having lasted for at least six months or being expected to last for a total duration of at least six months), regardless of when or how the mobile phone was acquired.

Examples of such non-precarious tenure in the absence of ownership are:

- Three years ago, a household received a mobile phone for safekeeping when a friend moved away. While the mobile phone is in safekeeping, the true, original owner does not enjoy its services, and the interviewed household uses it for its own personal calling. Thus, for the purposes of the survey, the original owner does not possess the mobile phone, and the interviewed household does possess it
- A high-level executive with a large private company has the use of, for example, a business vehicle. The executive is counted as possessing the vehicle

"Do not count mobile phones that are usually used to produce goods or services for sale (for example, a mobile phone that a household uses in a business that the household owns). These are business assets, not household assets.

"Likewise, do not count mobile phones that do not work, are indefinitely out-of-order, and have zero residual value. An example is a broken mobile phone that has been put in storage and will never be used again.

"The question is concerned with mobile phones of any kind, regardless of the model, brand, age, price, size, and so on."

"The main purpose of the asset is the one that is to be considered for the purposes of this question. For example, if a household possesses a mobile phone that also provides the option of listening to radio stations, then the household is to be considered as possessing a mobile phone and not as also possessing a radio.

Table 1: National poverty lines, poverty rates, and sample sizes for all of Cameroon and for the construction and validation samples, by households and people in 2007 and 2014

Year	Line or Rate	HHs or People	n	Poverty lines and poverty rates (%) National lines 100%	150%	200%
All of Cameroon						
	Line	People		666	998	1,331
2007	Rate	HHs	11,391	29.1	51.1	66.0
	Rate	People		39.9	63.2	76.5
	Line	People		911	1,367	1,823
2014	Rate	People	10,303	26.7	42.6	56.6
	Rate	People		37.5	56.2	70.2
Construction and calibration:						
(Selecting indicators and points, and associating scores with poverty likelihoods)						
	Rate	HHs	5,168	26.7	42.4	56.6
Validation:						
(Measuring accuracy)						
2007	Rate	HHs	11,391	29.1	51.1	66.0
2014	Rate	HHs	5,135	26.6	42.7	56.6

Source: 2014 ECAM

Poverty lines are XAF per day per adult-equivalent in average prices in Yaoundé in Oct. to Dec. 2014.

Table 1: International 2005 and 2011 poverty lines, poverty rates, and sample sizes for all of Cameroon and for the construction and validation samples, by households and people in 2007 and 2014

Year	Line or Rate	HHs or People	n	Poverty lines and poverty rates (%)					
				Intl. 2005 PPP lines				Intl. 2011 PPP lines	
				$1.25	**$2.00**	**$2.50**	**$5.00**	**$1.90**	**$3.10**
All of Cameroon									
	Line	People		394	631	789	1,578	393	641
2007	Rate	HHs	11,391	19.5	41.3	52.9	82.1	19.3	42.0
	Rate	People		28.8	54.4	65.9	90.5	28.6	55.1
	Line	People		475	760	950	1,900	473	772
2014	Rate	People	10,303	15.7	30.5	38.9	68.7	15.6	31.1
	Rate	People		24.0	42.9	52.7	82.1	23.9	43.6
Construction and calibration:									
(Selecting indicators and points, and associating scores with poverty likelihoods)									
	Rate	HHs	5,168	15.7	30.4	38.9	69.0	15.7	30.8
Validation:									
(Measuring accuracy)									
2007	Rate	HHs	11,391	19.5	41.3	52.9	82.1	19.3	42.0
2014	Rate	HHs	5,135	15.6	30.7	38.9	68.3	15.6	31.4

Source: 2014 ECAM

Poverty lines are XAF per day per person in average prices in Yaoundé in Oct. to Dec. 2014.

Table 1: Relative and percentile-based poverty lines, poverty rates, and sample sizes for all of Cameroon and for the construction and validation samples, by households and people in 2007 and 2014

Year	Line or Rate	HHs or People	n	Poverty lines and poverty rates (%)					
				Poorest half of people below 100% Natl. line	Percentile-based lines				
					20th	40th	50th	60th	80th
All of Cameroon									
	Line	People		367	368	536	646	780	1,202
2007	Rate	HHs	11,391	12.7	12.7	28.4	37.3	46.9	68.5
	Rate	People		19.9	20.0	40.0	50.0	60.0	80.0
	Line	People		420	434	730	913	1,140	1,812
2014	Rate	People	10,303	11.9	12.8	28.2	36.5	45.5	66.0
	Rate	People		18.7	20.0	40.0	50.0	60.0	80.0
Construction and calibration:									
(Selecting indicators and points, and associating scores with poverty likelihoods)									
	Rate	HHs	5,168	11.9	12.7	28.2	36.1	45.4	66.0
Validation:									
(Measuring accuracy)									
2007	Rate	HHs	11,391	12.7	12.7	28.4	37.3	46.9	68.5
2014	Rate	HHs	5,135	11.9	12.8	28.3	36.9	45.7	65.9

Source: 2014 ECAM

Poverty lines are XAF per day per person in average prices in Yaoundé in Oct. to Dec. 2014.

Table 2 (All of Cameroon): National poverty lines and poverty rates for households and people by urban/rural/all in 2007 and 2014

Region	Year	Line/rate	*n*	Poverty lines and poverty rates (%)		
				National lines		
				100%	150%	200%
Urban	2007	Line		703	1,055	1,406
		Rate (HHs)	6,242	7.4	22.7	38.5
		Rate (people)		11.9	32.7	50.8
Rural	2007	Line		646	969	1,292
		Rate (HHs)	5,149	41.3	67.2	81.5
		Rate (people)		54.5	79.1	89.9
All	2007	Line		666	998	1,331
		Rate (HHs)	11,391	29.1	51.1	66.0
		Rate (people)		39.9	63.2	76.5
Urban	2014	Line		923	1,385	1,846
		Rate (HHs)	6,681	7.7	21.2	36.3
		Rate (people)		12.4	31.2	49.9
Rural	2014	Line		900	1,350	1,800
		Rate (HHs)	3,622	47.5	66.0	78.9
		Rate (people)		61.2	79.7	89.4
All	2014	Line		911	1,367	1,823
		Rate (HHs)	10,303	26.7	42.6	56.6
		Rate (people)		37.5	56.2	70.2

Source and definitions: See Table 1 and text.

Table 2 (All of Cameroon): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all in 2007 and 2014

Region	Year	Line/rate	n	Poverty lines and poverty rates (%)					
				Intl. 2005 PPP lines				Intl. 2011 PPP lines	
				$1.25	**$2.00**	**$2.50**	**$5.00**	**$1.90**	**$3.10**
Urban	2007	Line		417	667	833	1,667	415	677
		Rate (HHs)	6,242	3.5	14.3	24.6	64.8	3.4	14.9
		Rate (people)		5.9	22.3	35.7	78.3	5.8	23.0
Rural	2007	Line		383	612	765	1,531	381	622
		Rate (HHs)	5,149	28.5	56.5	68.9	91.9	28.3	57.4
		Rate (people)		40.8	71.2	81.7	96.8	40.5	71.8
All	2007	Line		394	631	789	1,578	393	641
		Rate (HHs)	11,391	19.5	41.3	52.9	82.1	19.3	42.0
		Rate (people)		28.8	54.4	65.9	90.5	28.6	55.1
Urban	2014	Line		481	770	962	1,925	479	782
		Rate (HHs)	6,681	2.5	10.4	17.2	52.6	2.5	10.9
		Rate (people)		4.2	16.7	26.4	68.6	4.0	17.5
Rural	2014	Line		469	751	938	1,877	467	763
		Rate (HHs)	3,622	30.2	52.7	62.8	86.3	30.1	53.3
		Rate (people)		42.8	67.7	77.4	94.9	42.6	68.2
All	2014	Line		475	760	950	1,900	473	772
		Rate (HHs)	10,303	15.7	30.5	38.9	68.7	15.6	31.1
		Rate (people)		24.0	42.9	52.7	82.1	23.9	43.6

Source and definitions: See Table 1 and text.

Table 2 (All of Cameroon): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all in 2007 and 2014

Region	Year	Line/rate	n	Poverty lines and poverty rates (%)					
				Poorest half of people below 100% Natl. line	Percentile-based lines				
					20th	40th	50th	60th	80th
Urban	2007	Line		388	389	566	682	825	1,270
		Rate (HHs)	6,242	1.8	1.8	6.8	11.3	18.7	43.2
		Rate (people)		3.2	3.2	11.1	18.0	28.2	57.4
Rural	2007	Line		357	357	520	627	757	1,167
		Rate (HHs)	5,149	18.9	18.9	40.6	51.9	62.8	82.7
		Rate (people)		28.7	28.8	55.1	66.7	76.6	91.8
All	2007	Line		367	368	536	646	780	1,202
		Rate (HHs)	11,391	12.7	12.7	28.4	37.3	46.9	68.5
		Rate (people)		19.9	20.0	40.0	50.0	60.0	80.0
Urban	2014	Line		426	440	740	925	1,155	1,835
		Rate (HHs)	6,681	1.7	1.9	8.5	14.8	24.2	48.8
		Rate (people)		2.9	3.1	13.7	23.3	35.8	65.2
Rural	2014	Line		415	429	721	902	1,126	1,790
		Rate (HHs)	3,622	23.0	24.7	49.9	60.4	69.0	84.8
		Rate (people)		33.7	36.0	64.8	75.2	82.8	94.0
All	2014	Line		420	434	730	913	1,140	1,812
		Rate (HHs)	10,303	11.9	12.8	28.2	36.5	45.5	66.0
		Rate (people)		18.7	20.0	40.0	50.0	60.0	80.0

Source and definitions: See Table 1 and text.

Table 2 (Douala): National poverty lines and poverty rates for households and people by urban/rural/all in 2007 and 2014

Region	Year	Line/rate	*n*	Poverty lines and poverty rates (%)		
				National lines		
				100%	150%	200%
Urban	2007	Line		753	1,129	1,506
		Rate (HHs)	1,049	3.2	15.4	30.4
		Rate (people)		5.5	24.2	42.5
Rural	2007	Line		753	1,129	1,506
		Rate (HHs)	1,049	3.2	15.4	30.4
		Rate (people)		5.5	24.2	42.5
All	2007	Line		972	1,458	1,944
		Rate (HHs)	1,137	2.2	8.4	22.4
		Rate (people)		4.2	13.5	32.5
Urban	2014	Line		972	1,458	1,944
		Rate (HHs)	1,137	2.2	8.4	22.4
		Rate (people)		4.2	13.5	32.5
Rural	2014	Line		738	1,107	1,476
		Rate (HHs)	1,022	3.3	14.1	28.9
		Rate (people)		5.9	21.5	39.6
All	2014	Line		738	1,107	1,476
		Rate (HHs)	1,022	3.3	14.1	28.9
		Rate (people)		5.9	21.5	39.6

Source and definitions: See Table 1 and text.

Table 2 (Douala): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all in 2007 and 2014

Region	Year	Line/rate	n	Poverty lines and poverty rates (%)					
				Intl. 2005 PPP lines				Intl. 2011 PPP lines	
				$1.25	**$2.00**	**$2.50**	**$5.00**	**$1.90**	**$3.10**
Urban	2007	Line		446	714	892	1,785	445	725
		Rate (HHs)	1,049	1.1	7.9	16.9	57.9	0.9	8.5
		Rate (people)		2.0	13.6	26.8	74.4	1.8	14.6
Rural	2007	Line		446	714	892	1,785	445	725
		Rate (HHs)	1,049	1.1	7.9	16.9	57.9	0.9	8.5
		Rate (people)		2.0	13.6	26.8	74.4	1.8	14.6
All	2007	Line		507	811	1,013	2,026	505	824
		Rate (HHs)	1,137	0.1	3.3	7.2	37.8	0.1	3.6
		Rate (people)		0.2	6.0	12.0	52.0	0.2	6.5
Urban	2014	Line		507	811	1,013	2,026	505	824
		Rate (HHs)	1,137	0.1	3.3	7.2	37.8	0.1	3.6
		Rate (people)		0.2	6.0	12.0	52.0	0.2	6.5
Rural	2014	Line		437	700	875	1,750	436	711
		Rate (HHs)	1,022	0.7	7.1	15.5	58.5	0.7	7.4
		Rate (people)		1.3	11.7	23.7	70.8	1.3	12.0
All	2014	Line		437	700	875	1,750	436	711
		Rate (HHs)	1,022	0.7	7.1	15.5	58.5	0.7	7.4
		Rate (people)		1.3	11.7	23.7	70.8	1.3	12.0

Source and definitions: See Table 1 and text.

Table 2 (Douala): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all in 2007 and 2014

Region	Year	Line/rate	n	Poverty lines and poverty rates (%)					
				Poorest half of people below 100% Natl. line	Percentile-based lines				
					20th	40th	50th	60th	80th
Urban	2007	Line		416	416	606	730	883	1,360
		Rate (HHs)	1,049	0.3	0.3	3.0	5.8	11.7	35.9
		Rate (people)		0.5	0.5	5.0	10.0	19.2	51.1
Rural	2007	Line		416	416	606	730	883	1,360
		Rate (HHs)	1,049	0.3	0.3	3.0	5.8	11.7	35.9
		Rate (people)		0.5	0.5	5.0	10.0	19.2	51.1
All	2007	Line		448	463	779	974	1,216	1,932
		Rate (HHs)	1,137	0.0	0.0	2.4	5.6	10.8	33.3
		Rate (people)		0.0	0.0	4.5	9.7	17.2	47.6
Urban	2014	Line		448	463	779	974	1,216	1,932
		Rate (HHs)	1,137	0.0	0.0	2.4	5.6	10.8	33.3
		Rate (people)		0.0	0.0	4.5	9.7	17.2	47.6
Rural	2014	Line		408	408	594	716	866	1,334
		Rate (HHs)	1,022	0.3	0.3	2.7	5.0	10.0	35.2
		Rate (people)		0.5	0.5	5.0	8.6	16.3	47.5
All	2014	Line		408	408	594	716	866	1,334
		Rate (HHs)	1,022	0.3	0.3	2.7	5.0	10.0	35.2
		Rate (people)		0.5	0.5	5.0	8.6	16.3	47.5

Source and definitions: See Table 1 and text.

Table 2 (Yaoundé): National poverty lines and poverty rates for households and people by urban/rural/all in 2007 and 2014

Region	Year	Line/rate	n	Poverty lines and poverty rates (%)		
				National lines		
				100%	150%	200%
Urban	2007	Line		738	1,107	1,476
		Rate (HHs)	1,022	3.3	14.1	28.9
		Rate (people)		5.9	21.5	39.6
Rural	2007	Line		738	1,107	1,476
		Rate (HHs)	1,022	3.3	14.1	28.9
		Rate (people)		5.9	21.5	39.6
All	2007	Line		931	1,396	1,861
		Rate (HHs)	1,063	3.3	15.5	28.6
		Rate (people)		5.4	23.0	40.2
Urban	2014	Line		931	1,396	1,861
		Rate (HHs)	1,063	3.3	15.5	28.6
		Rate (people)		5.4	23.0	40.2
Rural	2014	Line		710	1,065	1,420
		Rate (HHs)	276	13.6	26.6	47.8
		Rate (people)		18.4	33.0	55.6
All	2014	Line		710	1,065	1,420
		Rate (HHs)	303	45.1	73.8	84.1
		Rate (people)		59.4	85.3	92.0

Source and definitions: See Table 1 and text.

Table 2 (Yaoundé): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all in 2007 and 2014

Region	Year	Line/rate	n	Poverty lines and poverty rates (%)					
				Intl. 2005 PPP lines				Intl. 2011 PPP lines	
				$1.25	**$2.00**	**$2.50**	**$5.00**	**$1.90**	**$3.10**
Urban	2007	Line		437	700	875	1,750	436	711
		Rate (HHs)	1,022	0.7	7.1	15.5	58.5	0.7	7.4
		Rate (people)		1.3	11.7	23.7	70.8	1.3	12.0
Rural	2007	Line		437	700	875	1,750	436	711
		Rate (HHs)	1,022	0.7	7.1	15.5	58.5	0.7	7.4
		Rate (people)		1.3	11.7	23.7	70.8	1.3	12.0
All	2007	Line		485	776	970	1,940	483	789
		Rate (HHs)	1,063	0.9	5.4	10.1	46.6	0.9	5.6
		Rate (people)		1.3	9.2	16.3	61.9	1.3	9.6
Urban	2014	Line		485	776	970	1,940	483	789
		Rate (HHs)	1,063	0.9	5.4	10.1	46.6	0.9	5.6
		Rate (people)		1.3	9.2	16.3	61.9	1.3	9.6
Rural	2014	Line		421	673	842	1,683	419	684
		Rate (HHs)	276	8.0	20.3	30.4	72.4	8.0	20.6
		Rate (people)		10.5	27.1	38.5	82.1	10.5	27.5
All	2014	Line		421	673	842	1,683	419	684
		Rate (HHs)	303	32.9	63.4	74.2	90.7	32.8	64.2
		Rate (people)		44.1	77.8	87.0	97.1	43.8	78.4

Source and definitions: See Table 1 and text.

Table 2 (Yaoundé): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all in 2007 and 2014

Region	Year	Line/rate	n	Poverty lines and poverty rates (%)					
				Poorest half of people below 100% Natl. line	Percentile-based lines				
					20th	40th	50th	60th	80th
Urban	2007	Line		408	408	594	716	866	1,334
		Rate (HHs)	1,022	0.3	0.3	2.7	5.0	10.0	35.2
		Rate (people)		0.5	0.5	5.0	8.6	16.3	47.5
Rural	2007	Line		408	408	594	716	866	1,334
		Rate (HHs)	1,022	0.3	0.3	2.7	5.0	10.0	35.2
		Rate (people)		0.5	0.5	5.0	8.6	16.3	47.5
All	2007	Line		429	443	746	933	1,165	1,851
		Rate (HHs)	1,063	0.5	0.5	3.6	8.6	17.0	43.6
		Rate (people)		0.9	0.9	6.2	14.5	26.4	59.0
Urban	2014	Line		429	443	746	933	1,165	1,851
		Rate (HHs)	1,063	0.5	0.5	3.6	8.6	17.0	43.6
		Rate (people)		0.9	0.9	6.2	14.5	26.4	59.0
Rural	2014	Line		392	392	572	689	833	1,283
		Rate (HHs)	276	4.7	4.7	13.6	18.9	22.8	52.5
		Rate (people)		7.0	7.0	17.9	24.5	29.6	62.8
All	2014	Line		392	392	572	689	833	1,283
		Rate (HHs)	303	19.7	19.7	49.2	60.9	70.7	84.5
		Rate (people)		27.3	27.3	63.1	75.0	84.7	92.9

Source and definitions: See Table 1 and text.

Table 2 (Adamaoua): National poverty lines and poverty rates for households and people by urban/rural/all in 2007 and 2014

Region	Year	Line/rate	*n*	Poverty lines and poverty rates (%)		
				National lines		
				100%	150%	200%
Urban	2007	Line		710	1,065	1,420
		Rate (HHs)	276	13.6	26.6	47.8
		Rate (people)		18.4	33.0	55.6
Rural	2007	Line		710	1,065	1,420
		Rate (HHs)	303	45.1	73.8	84.1
		Rate (people)		59.4	85.3	92.0
All	2007	Line		710	1,065	1,420
		Rate (HHs)	579	39.5	65.4	77.7
		Rate (people)		53.0	77.1	86.3
Urban	2014	Line		871	1,307	1,743
		Rate (HHs)	412	12.5	30.5	44.9
		Rate (people)		19.7	43.5	58.3
Rural	2014	Line		871	1,307	1,743
		Rate (HHs)	320	40.8	55.2	62.2
		Rate (people)		65.7	82.0	86.6
All	2014	Line		871	1,307	1,743
		Rate (HHs)	732	30.6	46.3	56.0
		Rate (people)		47.1	66.5	75.2

Source and definitions: See Table 1 and text.

Table 2 (Adamaoua): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all in 2007 and 2014

Region	Year	Line/rate	n	Poverty lines and poverty rates (%)					
				Intl. 2005 PPP lines				Intl. 2011 PPP lines	
				$1.25	**$2.00**	**$2.50**	**$5.00**	**$1.90**	**$3.10**
Urban	2007	Line		421	673	842	1,683	419	684
		Rate (HHs)	276	8.0	20.3	30.4	72.4	8.0	20.6
		Rate (people)		10.5	27.1	38.5	82.1	10.5	27.5
Rural	2007	Line		421	673	842	1,683	419	684
		Rate (HHs)	303	32.9	63.4	74.2	90.7	32.8	64.2
		Rate (people)		44.1	77.8	87.0	97.1	43.8	78.4
All	2007	Line		421	673	842	1,683	419	684
		Rate (HHs)	579	28.5	55.8	66.5	87.5	28.4	56.5
		Rate (people)		38.9	69.9	79.5	94.8	38.6	70.4
Urban	2014	Line		454	727	908	1,817	452	738
		Rate (HHs)	412	5.5	16.8	26.1	66.6	5.5	17.4
		Rate (people)		9.8	27.1	39.3	80.7	9.8	28.6
Rural	2014	Line		454	727	908	1,817	452	738
		Rate (HHs)	320	24.0	42.5	52.3	67.7	24.0	43.0
		Rate (people)		44.5	69.0	80.3	90.5	44.5	69.3
All	2014	Line		454	727	908	1,817	452	738
		Rate (HHs)	732	17.3	33.2	42.8	67.3	17.3	33.8
		Rate (people)		30.5	52.1	63.8	86.5	30.5	52.9

Source and definitions: See Table 1 and text.

Table 2 (Adamaoua): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all in 2007 and 2014

Region	Year	Line/rate	n	Poverty lines and poverty rates (%)					
				Poorest half of people below 100% Natl. line	Percentile-based lines				
					20th	40th	50th	60th	80th
Urban	2007	Line		392	392	572	689	833	1,283
		Rate (HHs)	276	4.7	4.7	13.6	18.9	22.8	52.5
		Rate (people)		7.0	7.0	17.9	24.5	29.6	62.8
Rural	2007	Line		392	392	572	689	833	1,283
		Rate (HHs)	303	19.7	19.7	49.2	60.9	70.7	84.5
		Rate (people)		27.3	27.3	63.1	75.0	84.7	92.9
All	2007	Line		392	392	572	689	833	1,283
		Rate (HHs)	579	17.0	17.0	42.9	53.4	62.2	78.9
		Rate (people)		24.1	24.1	56.0	67.1	76.1	88.2
Urban	2014	Line		402	415	698	873	1,090	1,732
		Rate (HHs)	412	3.3	4.1	13.7	21.8	32.9	61.9
		Rate (people)		5.7	7.6	22.4	33.9	47.7	77.6
Rural	2014	Line		402	415	698	873	1,090	1,732
		Rate (HHs)	320	20.1	21.1	41.5	47.9	55.8	63.1
		Rate (people)		37.4	39.5	68.0	73.5	82.6	87.7
All	2014	Line		402	415	698	873	1,090	1,732
		Rate (HHs)	732	14.0	15.0	31.5	38.5	47.6	62.7
		Rate (people)		24.6	26.7	49.6	57.5	68.5	83.6

Source and definitions: See Table 1 and text.

Table 2 (Centre): National poverty lines and poverty rates for households and people by urban/rural/all in 2007 and 2014

Region	Year	Line/rate	*n*	Poverty lines and poverty rates (%) National lines 100%	150%	200%
Urban	2007	Line		712	1,069	1,425
		Rate (HHs)	258	17.0	52.1	70.1
		Rate (people)		24.0	65.3	82.9
Rural	2007	Line		712	1,069	1,425
		Rate (HHs)	538	31.5	61.8	77.9
		Rate (people)		43.0	74.4	88.0
All	2007	Line		712	1,069	1,425
		Rate (HHs)	796	30.5	61.1	77.3
		Rate (people)		41.2	73.5	87.5
Urban	2014	Line		931	1,397	1,863
		Rate (HHs)	487	6.9	24.7	42.4
		Rate (people)		12.9	36.3	56.5
Rural	2014	Line		931	1,397	1,863
		Rate (HHs)	333	25.7	50.1	67.6
		Rate (people)		35.9	64.2	77.2
All	2014	Line		931	1,397	1,863
		Rate (HHs)	820	21.0	43.8	61.3
		Rate (people)		30.3	57.4	72.2

Source and definitions: See Table 1 and text.

Table 2 (Centre): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all in 2007 and 2014

Region	Year	Line/rate	n	Poverty lines and poverty rates (%)					
				Intl. 2005 PPP lines				Intl. 2011 PPP lines	
				$1.25	**$2.00**	**$2.50**	**$5.00**	**$1.90**	**$3.10**
Urban	2007	Line		422	675	844	1,689	421	686
		Rate (HHs)	258	10.6	36.6	54.1	87.5	10.6	39.1
		Rate (people)		16.0	49.9	68.6	94.3	16.0	52.4
Rural	2007	Line		422	675	844	1,689	421	686
		Rate (HHs)	538	17.2	47.4	60.4	90.0	16.8	48.5
		Rate (people)		24.4	62.9	75.2	96.6	23.7	63.5
All	2007	Line		422	675	844	1,689	421	686
		Rate (HHs)	796	16.7	46.6	60.0	89.8	16.3	47.8
		Rate (people)		23.6	61.7	74.6	96.4	23.0	62.5
Urban	2014	Line		486	777	971	1,942	484	789
		Rate (HHs)	487	1.7	11.2	21.6	60.3	0.9	11.6
		Rate (people)		4.2	20.5	33.4	76.0	1.7	21.0
Rural	2014	Line		486	777	971	1,942	484	789
		Rate (HHs)	333	9.9	31.8	45.5	78.7	9.6	33.9
		Rate (people)		14.7	44.9	59.7	88.4	13.8	47.4
All	2014	Line		486	777	971	1,942	484	789
		Rate (HHs)	820	7.9	26.7	39.6	74.1	7.5	28.3
		Rate (people)		12.2	39.0	53.3	85.4	10.9	41.0

Source and definitions: See Table 1 and text.

Table 2 (Centre): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all in 2007 and 2014

Region	Year	Line/rate	n	Poverty lines and poverty rates (%)					
				Poorest half of people below 100% Natl. line	Percentile-based lines				
					20th	40th	50th	60th	80th
Urban	2007	Line		393	394	574	691	835	1,287
		Rate (HHs)	258	4.9	4.9	17.6	30.0	44.4	69.9
		Rate (people)		6.3	6.3	24.6	41.7	59.5	84.2
Rural	2007	Line		393	394	574	691	835	1,287
		Rate (HHs)	538	6.9	6.9	30.8	41.8	53.3	80.0
		Rate (people)		10.1	10.1	44.2	57.5	68.9	90.0
All	2007	Line		393	394	574	691	835	1,287
		Rate (HHs)	796	6.8	6.8	29.9	41.0	52.7	79.3
		Rate (people)		9.7	9.7	42.4	56.0	68.0	89.5
Urban	2014	Line		429	444	746	934	1,165	1,852
		Rate (HHs)	487	0.2	0.2	8.9	19.1	28.8	56.7
		Rate (people)		0.5	0.5	16.8	30.1	42.5	72.4
Rural	2014	Line		429	444	746	934	1,165	1,852
		Rate (HHs)	333	5.3	6.5	28.1	42.7	53.7	74.9
		Rate (people)		8.0	10.2	39.9	57.4	67.4	84.8
All	2014	Line		429	444	746	934	1,165	1,852
		Rate (HHs)	820	4.0	4.9	23.3	36.8	47.5	70.4
		Rate (people)		6.2	7.8	34.3	50.8	61.3	81.8

Source and definitions: See Table 1 and text.

Table 2 (Est): National poverty lines and poverty rates for households and people by urban/rural/all in 2007 and 2014

Region	Year	Line/rate	*n*	Poverty lines and poverty rates (%) National lines 100%	150%	200%
Urban	2007	Line		666	999	1,332
		Rate (HHs)	270	9.6	28.7	49.1
		Rate (people)		16.2	42.5	63.5
Rural	2007	Line		666	999	1,332
		Rate (HHs)	317	40.4	64.5	82.4
		Rate (people)		56.3	79.4	92.8
All	2007	Line		666	999	1,332
		Rate (HHs)	587	35.8	59.1	77.4
		Rate (people)		50.4	74.0	88.5
Urban	2014	Line		812	1,217	1,623
		Rate (HHs)	346	11.2	23.7	42.1
		Rate (people)		17.7	36.2	58.4
Rural	2014	Line		812	1,217	1,623
		Rate (HHs)	281	26.1	48.0	72.0
		Rate (people)		34.9	62.8	84.9
All	2014	Line		812	1,217	1,623
		Rate (HHs)	627	21.4	40.4	62.7
		Rate (people)		30.0	55.2	77.3

Source and definitions: See Table 1 and text.

Table 2 (Est): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all in 2007 and 2014

Region	Year	Line/rate	n	Poverty lines and poverty rates (%)					
				Intl. 2005 PPP lines				Intl. 2011 PPP lines	
				$1.25	**$2.00**	**$2.50**	**$5.00**	**$1.90**	**$3.10**
Urban	2007	Line		395	631	789	1,578	393	641
		Rate (HHs)	270	3.9	19.6	32.7	68.8	3.9	19.6
		Rate (people)		6.5	30.2	46.2	84.3	6.5	30.2
Rural	2007	Line		395	631	789	1,578	393	641
		Rate (HHs)	317	28.5	55.8	70.8	92.1	28.5	57.0
		Rate (people)		44.3	72.7	85.1	98.1	44.3	73.7
All	2007	Line		395	631	789	1,578	393	641
		Rate (HHs)	587	24.8	50.3	65.0	88.6	24.8	51.3
		Rate (people)		38.7	66.4	79.4	96.0	38.7	67.3
Urban	2014	Line		423	677	846	1,692	421	688
		Rate (HHs)	346	2.8	11.9	23.1	57.3	2.8	12.9
		Rate (people)		5.3	20.6	34.5	74.2	5.3	22.1
Rural	2014	Line		423	677	846	1,692	421	688
		Rate (HHs)	281	13.8	32.8	45.7	83.9	13.0	33.2
		Rate (people)		22.2	44.6	60.5	93.4	21.1	45.1
All	2014	Line		423	677	846	1,692	421	688
		Rate (HHs)	627	10.4	26.3	38.6	75.6	9.9	26.8
		Rate (people)		17.3	37.7	53.1	87.9	16.6	38.5

Source and definitions: See Table 1 and text.

Table 2 (Est): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all in 2007 and 2014

Region	Year	Line/rate	n	Poverty lines and poverty rates (%)					
				Poorest half of people below 100% Natl. line	Percentile-based lines				
					20th	40th	50th	60th	80th
Urban	2007	Line		368	368	536	646	781	1,203
		Rate (HHs)	270	1.6	1.8	9.2	16.1	26.8	51.8
		Rate (people)		2.8	3.0	16.6	26.5	39.2	68.4
Rural	2007	Line		368	368	536	646	781	1,203
		Rate (HHs)	317	20.1	20.1	38.8	52.2	64.3	82.3
		Rate (people)		32.9	32.9	56.0	68.8	79.3	93.7
All	2007	Line		368	368	536	646	781	1,203
		Rate (HHs)	587	17.3	17.4	34.3	46.7	58.6	77.7
		Rate (people)		28.4	28.5	50.2	62.6	73.4	90.0
Urban	2014	Line		374	386	650	813	1,015	1,614
		Rate (HHs)	346	1.6	2.0	11.0	19.8	31.2	53.3
		Rate (people)		3.2	3.6	18.7	30.8	46.0	72.0
Rural	2014	Line		374	386	650	813	1,015	1,614
		Rate (HHs)	281	9.2	10.0	31.7	41.8	55.1	81.4
		Rate (people)		16.4	16.9	43.6	56.0	70.8	92.1
All	2014	Line		374	386	650	813	1,015	1,614
		Rate (HHs)	627	6.9	7.5	25.2	34.9	47.6	72.6
		Rate (people)		12.7	13.1	36.5	48.8	63.7	86.3

Source and definitions: See Table 1 and text.

Table 2 (Extrême-Nord): National poverty lines and poverty rates for households and people by urban/rural/all in 2007 and 2014

Region	Year	Line/rate	*n*	Poverty lines and poverty rates (%)		
				National lines		
				100%	150%	200%
Urban	2007	Line		596	895	1,193
		Rate (HHs)	600	13.6	31.5	48.8
		Rate (people)		20.3	42.1	60.8
Rural	2007	Line		596	895	1,193
		Rate (HHs)	883	64.4	84.1	91.8
		Rate (people)		72.1	88.9	95.0
All	2007	Line		596	895	1,193
		Rate (HHs)	1,483	58.4	77.8	86.6
		Rate (people)		65.9	83.2	90.9
Urban	2014	Line		896	1,344	1,793
		Rate (HHs)	531	27.1	46.2	60.4
		Rate (people)		34.5	55.3	71.0
Rural	2014	Line		896	1,344	1,793
		Rate (HHs)	568	76.1	88.4	95.3
		Rate (people)		83.9	93.3	97.6
All	2014	Line		896	1,344	1,793
		Rate (HHs)	1,099	65.8	79.5	87.9
		Rate (people)		74.3	85.9	92.4

Source and definitions: See Table 1 and text.

Table 2 (Extrême-Nord): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all in 2007 and 2014

Region	Year	Line/rate	n	Poverty lines and poverty rates (%)					
				Intl. 2005 PPP lines				Intl. 2011 PPP lines	
				$1.25	**$2.00**	**$2.50**	**$5.00**	**$1.90**	**$3.10**
Urban	2007	Line		353	566	707	1,414	352	575
		Rate (HHs)	600	7.7	24.5	35.3	75.6	7.7	24.7
		Rate (people)		12.5	35.4	45.6	85.6	12.5	35.5
Rural	2007	Line		353	566	707	1,414	352	575
		Rate (HHs)	883	50.4	77.6	85.8	96.7	50.1	78.2
		Rate (people)		59.8	83.9	90.9	98.4	59.4	84.1
All	2007	Line		353	566	707	1,414	352	575
		Rate (HHs)	1,483	45.3	71.2	79.8	94.2	45.0	71.8
		Rate (people)		54.1	78.1	85.5	96.9	53.8	78.3
Urban	2014	Line		467	748	934	1,869	466	760
		Rate (HHs)	531	13.3	33.8	41.6	76.3	13.3	34.6
		Rate (people)		16.3	42.1	51.3	87.1	16.3	43.2
Rural	2014	Line		467	748	934	1,869	466	760
		Rate (HHs)	568	54.5	79.6	87.6	98.0	54.5	80.2
		Rate (people)		64.5	87.3	93.0	99.2	64.5	87.6
All	2014	Line		467	748	934	1,869	466	760
		Rate (HHs)	1,099	45.8	69.9	77.8	93.4	45.8	70.5
		Rate (people)		55.1	78.5	84.9	96.8	55.1	78.9

Source and definitions: See Table 1 and text.

Table 2 (Extrême-Nord): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all in 2007 and 2014

Region	Year	Line/rate	n	Poverty lines and poverty rates (%)					
				Poorest half of people below 100% Natl. line	Percentile-based lines				
					20th	40th	50th	60th	80th
Urban	2007	Line		329	330	480	579	699	1,078
		Rate (HHs)	600	4.3	4.3	13.7	20.3	28.3	53.5
		Rate (people)		7.7	7.7	20.1	31.1	39.3	65.7
Rural	2007	Line		329	330	480	579	699	1,078
		Rate (HHs)	883	39.3	39.5	62.7	74.2	81.9	93.0
		Rate (people)		48.7	49.0	71.3	80.9	87.1	96.5
All	2007	Line		329	330	480	579	699	1,078
		Rate (HHs)	1,483	35.1	35.3	56.8	67.7	75.4	88.3
		Rate (people)		43.8	44.0	65.1	74.9	81.3	92.8
Urban	2014	Line		413	427	718	898	1,121	1,782
		Rate (HHs)	531	11.2	11.8	30.7	39.6	50.5	72.6
		Rate (people)		14.1	14.7	38.4	49.2	60.4	84.3
Rural	2014	Line		413	427	718	898	1,121	1,782
		Rate (HHs)	568	43.0	45.2	78.2	86.4	90.8	97.7
		Rate (people)		53.3	55.2	85.8	92.3	95.3	99.0
All	2014	Line		413	427	718	898	1,121	1,782
		Rate (HHs)	1,099	36.3	38.1	68.2	76.5	82.3	92.4
		Rate (people)		45.6	47.3	76.5	83.9	88.5	96.1

Source and definitions: See Table 1 and text.

Table 2 (Littoral): National poverty lines and poverty rates for households and people by urban/rural/all in 2007 and 2014

Region	Year	Line/rate	*n*	Poverty lines and poverty rates (%) National lines 100%	150%	200%
Urban	2007	Line		712	1,067	1,423
		Rate (HHs)	322	27.7	52.7	70.7
		Rate (people)		34.5	60.3	77.6
Rural	2007	Line		712	1,067	1,423
		Rate (HHs)	315	20.6	53.7	74.0
		Rate (people)		28.7	68.5	85.1
All	2007	Line		712	1,067	1,423
		Rate (HHs)	637	22.9	53.4	72.9
		Rate (people)		30.8	65.5	82.4
Urban	2014	Line		913	1,369	1,826
		Rate (HHs)	484	12.1	38.4	59.8
		Rate (people)		16.6	48.4	70.5
Rural	2014	Line		913	1,369	1,826
		Rate (HHs)	178	18.5	40.0	59.9
		Rate (people)		24.3	53.3	74.9
All	2014	Line		913	1,369	1,826
		Rate (HHs)	662	14.7	39.0	59.8
		Rate (people)		19.5	50.3	72.2

Source and definitions: See Table 1 and text.

Table 2 (Littoral): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all in 2007 and 2014

Region	Year	Line/rate	n	Poverty lines and poverty rates (%)					
				Intl. 2005 PPP lines				Intl. 2011 PPP lines	
				$1.25	**$2.00**	**$2.50**	**$5.00**	**$1.90**	**$3.10**
Urban	2007	Line		422	675	843	1,687	420	686
		Rate (HHs)	322	14.2	39.7	56.2	86.5	14.2	40.8
		Rate (people)		20.5	48.3	64.5	90.6	20.5	49.6
Rural	2007	Line		422	675	843	1,687	420	686
		Rate (HHs)	315	9.3	35.6	55.5	86.9	8.7	36.5
		Rate (people)		15.1	50.9	72.8	94.3	14.3	51.9
All	2007	Line		422	675	843	1,687	420	686
		Rate (HHs)	637	10.9	36.9	55.7	86.8	10.4	37.9
		Rate (people)		17.1	49.9	69.8	92.9	16.6	51.1
Urban	2014	Line		476	761	952	1,903	474	774
		Rate (HHs)	484	2.5	17.4	30.0	74.6	2.5	17.8
		Rate (people)		4.5	24.4	40.5	84.6	4.5	25.1
Rural	2014	Line		476	761	952	1,903	474	774
		Rate (HHs)	178	4.7	21.3	36.0	73.6	4.7	24.0
		Rate (people)		7.0	29.1	48.5	89.6	7.0	33.1
All	2014	Line		476	761	952	1,903	474	774
		Rate (HHs)	662	3.4	19.0	32.5	74.2	3.4	20.4
		Rate (people)		5.4	26.2	43.6	86.5	5.4	28.1

Source and definitions: See Table 1 and text.

Table 2 (Littoral): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all in 2007 and 2014

Region	Year	Line/rate	n	Poverty lines and poverty rates (%)					
				Poorest half of people below 100% Natl. line	Percentile-based lines				
					20th	40th	50th	60th	80th
Urban	2007	Line		393	393	573	690	834	1,286
		Rate (HHs)	322	9.0	9.0	22.4	33.7	49.9	72.2
		Rate (people)		13.5	13.5	30.2	43.1	58.1	80.3
Rural	2007	Line		393	393	573	690	834	1,286
		Rate (HHs)	315	3.9	3.9	18.7	29.6	46.3	72.5
		Rate (people)		6.4	6.4	27.4	43.1	64.3	85.8
All	2007	Line		393	393	573	690	834	1,286
		Rate (HHs)	637	5.6	5.6	19.9	30.9	47.4	72.4
		Rate (people)		9.0	9.0	28.4	43.1	62.0	83.8
Urban	2014	Line		421	435	731	915	1,142	1,815
		Rate (HHs)	484	1.6	1.8	13.0	26.1	40.7	71.7
		Rate (people)		3.2	3.4	18.9	36.1	52.5	82.4
Rural	2014	Line		421	435	731	915	1,142	1,815
		Rate (HHs)	178	4.3	4.7	19.5	33.7	44.9	73.4
		Rate (people)		6.6	7.0	26.7	46.5	59.5	89.5
All	2014	Line		421	435	731	915	1,142	1,815
		Rate (HHs)	662	2.7	3.0	15.7	29.3	42.5	72.4
		Rate (people)		4.5	4.8	21.9	40.1	55.2	85.1

Source and definitions: See Table 1 and text.

Table 2 (Nord): National poverty lines and poverty rates for households and people by urban/rural/all in 2007 and 2014

Region	Year	Line/rate	*n*	Poverty lines and poverty rates (%) National lines 100%	150%	200%
Urban	2007	Line		608	912	1,217
		Rate (HHs)	371	15.8	42.8	57.4
		Rate (people)		24.7	56.1	69.2
Rural	2007	Line		608	912	1,217
		Rate (HHs)	402	61.6	83.6	91.8
		Rate (people)		73.6	89.6	94.9
All	2007	Line		608	912	1,217
		Rate (HHs)	773	52.2	75.2	84.8
		Rate (people)		63.7	82.8	89.7
Urban	2014	Line		925	1,387	1,850
		Rate (HHs)	460	16.2	36.8	49.5
		Rate (people)		26.2	53.6	66.2
Rural	2014	Line		925	1,387	1,850
		Rate (HHs)	507	70.6	87.4	94.4
		Rate (people)		79.2	93.3	97.6
All	2014	Line		925	1,387	1,850
		Rate (HHs)	967	56.7	74.4	82.9
		Rate (people)		67.9	84.8	90.9

Source and definitions: See Table 1 and text.

Table 2 (Nord): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all in 2007 and 2014

Region	Year	Line/rate	n	Poverty lines and poverty rates (%)					
				Intl. 2005 PPP lines				Intl. 2011 PPP lines	
				$1.25	**$2.00**	**$2.50**	**$5.00**	**$1.90**	**$3.10**
Urban	2007	Line		360	577	721	1,442	359	586
		Rate (HHs)	371	10.6	28.8	44.8	77.7	10.6	29.2
		Rate (people)		15.9	43.2	59.4	87.0	15.9	43.8
Rural	2007	Line		360	577	721	1,442	359	586
		Rate (HHs)	402	50.0	74.8	84.1	97.6	50.0	74.9
		Rate (people)		63.6	85.3	91.5	99.0	63.6	85.3
All	2007	Line		360	577	721	1,442	359	586
		Rate (HHs)	773	41.9	65.4	76.1	93.5	41.9	65.5
		Rate (people)		53.9	76.7	85.0	96.6	53.9	76.9
Urban	2014	Line		482	771	964	1,928	480	784
		Rate (HHs)	460	7.2	21.2	32.6	64.8	7.2	23.1
		Rate (people)		12.6	32.7	48.6	80.4	12.6	35.1
Rural	2014	Line		482	771	964	1,928	480	784
		Rate (HHs)	507	49.4	77.5	85.2	97.3	49.4	77.6
		Rate (people)		60.6	86.3	92.2	99.3	60.6	86.3
All	2014	Line		482	771	964	1,928	480	784
		Rate (HHs)	967	38.6	63.1	71.8	89.0	38.6	63.7
		Rate (people)		50.4	74.9	82.9	95.2	50.4	75.4

Source and definitions: See Table 1 and text.

Table 2 (Nord): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all in 2007 and 2014

Region	Year	Line/rate	n	Poverty lines and poverty rates (%)					
				Poorest half of people below 100% Natl. line	Percentile-based lines				
					20th	40th	50th	60th	80th
Urban	2007	Line		336	336	490	590	713	1,099
		Rate (HHs)	371	5.5	5.5	16.4	23.7	36.3	57.8
		Rate (people)		8.7	8.7	24.3	36.0	52.1	70.7
Rural	2007	Line		336	336	490	590	713	1,099
		Rate (HHs)	402	30.0	30.0	61.9	71.6	78.3	92.0
		Rate (people)		41.9	41.9	74.6	82.5	87.6	96.3
All	2007	Line		336	336	490	590	713	1,099
		Rate (HHs)	773	25.0	25.0	52.6	61.8	69.7	85.0
		Rate (people)		35.2	35.2	64.4	73.1	80.4	91.1
Urban	2014	Line		426	440	741	927	1,157	1,839
		Rate (HHs)	460	4.4	4.8	17.5	28.9	39.1	60.9
		Rate (people)		8.1	8.4	27.6	43.4	55.5	77.4
Rural	2014	Line		426	440	741	927	1,157	1,839
		Rate (HHs)	507	37.6	41.5	74.1	83.2	89.7	96.5
		Rate (people)		47.3	52.4	84.1	91.1	95.4	99.0
All	2014	Line		426	440	741	927	1,157	1,839
		Rate (HHs)	967	29.1	32.1	59.6	69.3	76.7	87.4
		Rate (people)		38.9	43.0	72.1	80.9	86.9	94.4

Source and definitions: See Table 1 and text.

Table 2 (Nord-Ouest): National poverty lines and poverty rates for households and people by urban/rural/all in 2007 and 2014

Region	Year	Line/rate	*n*	Poverty lines and poverty rates (%)		
				National lines		
				100%	150%	200%
Urban	2007	Line		630	945	1,259
		Rate (HHs)	635	13.4	30.8	45.9
		Rate (people)		19.6	39.4	56.0
Rural	2007	Line		630	945	1,259
		Rate (HHs)	847	42.2	71.1	83.8
		Rate (people)		58.3	83.0	91.3
All	2007	Line		630	945	1,259
		Rate (HHs)	1,482	36.8	63.5	76.7
		Rate (people)		51.0	74.8	84.7
Urban	2014	Line		931	1,396	1,862
		Rate (HHs)	511	20.7	43.0	61.1
		Rate (people)		27.7	55.5	74.5
Rural	2014	Line		931	1,396	1,862
		Rate (HHs)	429	60.1	76.0	85.5
		Rate (people)		71.5	84.9	92.6
All	2014	Line		931	1,396	1,862
		Rate (HHs)	940	44.4	62.9	75.8
		Rate (people)		55.3	74.0	85.9

Source and definitions: See Table 1 and text.

Table 2 (Nord-Ouest): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all in 2007 and 2014

Region	Year	Line/rate	n	Poverty lines and poverty rates (%)					
				Intl. 2005 PPP lines				Intl. 2011 PPP lines	
				$1.25	**$2.00**	**$2.50**	**$5.00**	**$1.90**	**$3.10**
Urban	2007	Line		373	597	746	1,493	372	607
		Rate (HHs)	635	7.1	20.8	29.9	68.9	7.0	21.6
		Rate (people)		12.0	28.3	40.0	80.1	11.9	29.2
Rural	2007	Line		373	597	746	1,493	372	607
		Rate (HHs)	847	28.8	59.7	71.7	92.9	28.5	60.8
		Rate (people)		43.8	75.1	84.6	96.0	43.3	76.1
All	2007	Line		373	597	746	1,493	372	607
		Rate (HHs)	1,482	24.7	52.4	63.9	88.4	24.5	53.4
		Rate (people)		37.8	66.3	76.2	93.0	37.4	67.3
Urban	2014	Line		485	776	970	1,941	483	789
		Rate (HHs)	511	7.8	25.2	37.0	72.6	7.6	26.5
		Rate (people)		11.3	34.3	50.3	85.5	10.7	36.2
Rural	2014	Line		485	776	970	1,941	483	789
		Rate (HHs)	429	41.5	62.0	70.5	90.5	41.5	62.3
		Rate (people)		54.4	74.2	81.6	96.5	54.4	74.3
All	2014	Line		485	776	970	1,941	483	789
		Rate (HHs)	940	28.1	47.4	57.2	83.4	28.0	48.1
		Rate (people)		38.5	59.5	70.0	92.4	38.2	60.2

Source and definitions: See Table 1 and text.

Table 2 (Nord-Ouest): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all in 2007 and 2014

Region	Year	Line/rate	n	Poverty lines and poverty rates (%)					
				Poorest half of people below 100% Natl. line	Percentile-based lines				
					20th	40th	50th	60th	80th
Urban	2007	Line		348	348	507	611	738	1,138
		Rate (HHs)	635	4.2	4.2	11.8	17.5	26.0	47.9
		Rate (people)		7.6	7.6	18.1	24.7	35.7	59.0
Rural	2007	Line		348	348	507	611	738	1,138
		Rate (HHs)	847	19.1	19.2	41.9	54.1	66.3	85.4
		Rate (people)		30.7	30.8	58.9	70.4	80.3	92.6
All	2007	Line		348	348	507	611	738	1,138
		Rate (HHs)	1,482	16.3	16.4	36.2	47.3	58.7	78.4
		Rate (people)		26.4	26.5	51.3	61.8	71.9	86.3
Urban	2014	Line		429	443	746	933	1,165	1,851
		Rate (HHs)	511	5.2	5.8	21.6	33.6	46.9	70.3
		Rate (people)		7.0	8.0	29.6	45.9	60.7	83.9
Rural	2014	Line		429	443	746	933	1,165	1,851
		Rate (HHs)	429	33.8	36.3	59.8	69.0	75.9	90.5
		Rate (people)		44.4	47.6	72.6	79.6	86.1	96.5
All	2014	Line		429	443	746	933	1,165	1,851
		Rate (HHs)	940	22.4	24.2	44.7	54.9	64.4	82.5
		Rate (people)		30.5	33.0	56.7	67.1	76.7	91.8

Source and definitions: See Table 1 and text.

Table 2 (Ouest): National poverty lines and poverty rates for households and people by urban/rural/all in 2007 and 2014

Region	Year	Line/rate	*n*	Poverty lines and poverty rates (%)		
				National lines		
				100%	150%	200%
Urban	2007	Line		625	937	1,249
		Rate (HHs)	577	14.9	38.7	56.5
		Rate (people)		19.4	49.3	66.9
Rural	2007	Line		625	937	1,249
		Rate (HHs)	717	26.0	58.2	77.0
		Rate (people)		33.0	68.4	85.4
All	2007	Line		625	937	1,249
		Rate (HHs)	1,294	22.7	52.5	71.0
		Rate (people)		28.9	62.7	79.8
Urban	2014	Line		819	1,229	1,639
		Rate (HHs)	495	10.2	30.7	49.2
		Rate (people)		16.0	43.7	66.7
Rural	2014	Line		819	1,229	1,639
		Rate (HHs)	415	18.6	48.9	72.4
		Rate (people)		26.7	62.2	84.5
All	2014	Line		819	1,229	1,639
		Rate (HHs)	910	14.9	40.9	62.2
		Rate (people)		21.7	53.5	76.1

Source and definitions: See Table 1 and text.

Table 2 (Ouest): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all in 2007 and 2014

Region	Year	Line/rate	n	Poverty lines and poverty rates (%)					
				Intl. 2005 PPP lines				Intl. 2011 PPP lines	
				$1.25	**$2.00**	**$2.50**	**$5.00**	**$1.90**	**$3.10**
Urban	2007	Line		370	592	740	1,480	369	602
		Rate (HHs)	577	7.6	28.6	43.9	80.8	7.6	30.2
		Rate (people)		10.5	38.3	55.8	90.7	10.5	40.4
Rural	2007	Line		370	592	740	1,480	369	602
		Rate (HHs)	717	13.2	45.7	62.4	93.3	13.0	46.4
		Rate (people)		18.7	56.8	73.4	97.2	18.5	57.7
All	2007	Line		370	592	740	1,480	369	602
		Rate (HHs)	1,294	11.5	40.7	57.1	89.7	11.4	41.7
		Rate (people)		16.2	51.3	68.2	95.3	16.1	52.6
Urban	2014	Line		427	683	854	1,709	426	694
		Rate (HHs)	495	1.7	14.1	25.2	66.8	1.7	14.6
		Rate (people)		2.7	21.3	36.3	84.2	2.7	22.2
Rural	2014	Line		427	683	854	1,709	426	694
		Rate (HHs)	415	4.7	32.5	44.6	84.2	4.7	32.7
		Rate (people)		8.3	44.3	58.5	92.5	8.3	44.5
All	2014	Line		427	683	854	1,709	426	694
		Rate (HHs)	910	3.4	24.4	36.0	76.5	3.4	24.7
		Rate (people)		5.7	33.5	48.0	88.6	5.7	34.0

Source and definitions: See Table 1 and text.

Table 2 (Ouest): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all in 2007 and 2014

Region	Year	Line/rate	n	Poverty lines and poverty rates (%)					
				Poorest half of people below 100% Natl. line	Percentile-based lines				
					20th	40th	50th	60th	80th
Urban	2007	Line		345	345	503	606	732	1,128
		Rate (HHs)	577	4.2	4.2	13.5	23.6	36.0	61.7
		Rate (people)		6.0	6.0	18.8	31.4	46.9	73.3
Rural	2007	Line		345	345	503	606	732	1,128
		Rate (HHs)	717	7.7	7.7	26.7	40.1	53.4	80.2
		Rate (people)		11.9	11.9	35.5	50.9	65.1	89.0
All	2007	Line		345	345	503	606	732	1,128
		Rate (HHs)	1,294	6.6	6.6	22.9	35.3	48.3	74.8
		Rate (people)		10.1	10.1	30.5	45.1	59.6	84.3
Urban	2014	Line		378	390	657	821	1,025	1,629
		Rate (HHs)	495	1.2	1.2	11.9	20.9	37.9	63.6
		Rate (people)		1.9	1.9	18.1	31.2	53.5	81.2
Rural	2014	Line		378	390	657	821	1,025	1,629
		Rate (HHs)	415	2.5	2.6	26.9	41.2	55.3	82.7
		Rate (people)		5.2	5.3	37.5	55.1	69.4	91.5
All	2014	Line		378	390	657	821	1,025	1,629
		Rate (HHs)	910	1.9	2.0	20.3	32.2	47.6	74.3
		Rate (people)		3.7	3.7	28.4	43.8	61.9	86.6

Source and definitions: See Table 1 and text.

Table 2 (Sud): National poverty lines and poverty rates for households and people by urban/rural/all in 2007 and 2014

Region	Year	Line/rate	*n*	Poverty lines and poverty rates (%) National lines 100%	150%	200%
Urban	2007	Line		685	1,028	1,370
		Rate (HHs)	255	8.6	25.1	46.1
		Rate (people)		12.7	33.4	56.2
Rural	2007	Line		685	1,028	1,370
		Rate (HHs)	280	21.5	47.4	65.4
		Rate (people)		30.8	60.8	75.7
All	2007	Line		685	1,028	1,370
		Rate (HHs)	535	20.4	45.5	63.7
		Rate (people)		29.3	58.4	74.0
Urban	2014	Line		951	1,427	1,903
		Rate (HHs)	334	3.2	16.9	36.0
		Rate (people)		7.1	26.1	49.2
Rural	2014	Line		951	1,427	1,903
		Rate (HHs)	213	26.3	48.4	69.7
		Rate (people)		45.8	69.8	86.6
All	2014	Line		951	1,427	1,903
		Rate (HHs)	547	18.5	37.7	58.2
		Rate (people)		34.1	56.5	75.3

Source and definitions: See Table 1 and text.

Table 2 (Sud): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all in 2007 and 2014

Region	Year	Line/rate	n	Poverty lines and poverty rates (%)					
				Intl. 2005 PPP lines				Intl. 2011 PPP lines	
				$1.25	**$2.00**	**$2.50**	**$5.00**	**$1.90**	**$3.10**
Urban	2007	Line		406	650	812	1,624	404	660
		Rate (HHs)	255	2.4	12.2	26.0	71.9	2.4	13.6
		Rate (people)		3.8	18.4	35.4	82.5	3.8	19.6
Rural	2007	Line		406	650	812	1,624	404	660
		Rate (HHs)	280	10.2	39.4	47.7	83.9	10.2	40.0
		Rate (people)		15.3	53.7	62.5	92.3	15.3	54.4
All	2007	Line		406	650	812	1,624	404	660
		Rate (HHs)	535	9.5	37.0	45.8	82.8	9.5	37.7
		Rate (people)		14.3	50.6	60.1	91.5	14.3	51.4
Urban	2014	Line		496	793	992	1,983	494	806
		Rate (HHs)	334	0.2	5.1	11.0	56.5	0.2	5.1
		Rate (people)		0.7	10.8	20.0	73.9	0.7	10.8
Rural	2014	Line		496	793	992	1,983	494	806
		Rate (HHs)	213	10.8	31.4	43.5	80.4	10.4	31.9
		Rate (people)		24.8	52.0	66.0	93.1	24.3	52.4
All	2014	Line		496	793	992	1,983	494	806
		Rate (HHs)	547	7.2	22.5	32.4	72.2	7.0	22.8
		Rate (people)		17.5	39.5	52.0	87.3	17.2	39.8

Source and definitions: See Table 1 and text.

Table 2 (Sud): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all in 2007 and 2014

Region	Year	Line/rate	n	Poverty lines and poverty rates (%)					
				Poorest half of people below 100% Natl. line	Percentile-based lines				
					20th	40th	50th	60th	80th
Urban	2007	Line		378	379	552	665	803	1,238
		Rate (HHs)	255	1.1	1.1	6.2	9.5	17.6	48.6
		Rate (people)		1.5	1.5	10.3	14.4	25.4	61.6
Rural	2007	Line		378	379	552	665	803	1,238
		Rate (HHs)	280	6.4	6.4	20.2	31.4	42.9	68.7
		Rate (people)		10.3	10.3	29.6	44.8	57.7	80.7
All	2007	Line		378	379	552	665	803	1,238
		Rate (HHs)	535	6.0	6.0	19.0	29.5	40.7	66.9
		Rate (people)		9.5	9.5	27.9	42.1	54.9	79.0
Urban	2014	Line		439	453	762	954	1,190	1,892
		Rate (HHs)	334	0.0	0.0	3.5	8.1	19.1	52.7
		Rate (people)		0.0	0.0	7.5	15.1	30.6	69.8
Rural	2014	Line		439	453	762	954	1,190	1,892
		Rate (HHs)	213	7.3	7.3	26.9	40.3	54.6	78.6
		Rate (people)		18.4	18.4	46.5	62.6	74.9	91.9
All	2014	Line		439	453	762	954	1,190	1,892
		Rate (HHs)	547	4.8	4.8	19.0	29.3	42.6	69.8
		Rate (people)		12.8	12.8	34.6	48.2	61.5	85.2

Source and definitions: See Table 1 and text.

Table 2 (Sud-Ouest): National poverty lines and poverty rates for households and people by urban/rural/all in 2007 and 2014

Region	Year	Line/rate	*n*	Poverty lines and poverty rates (%)		
				National lines		
				100%	150%	200%
Urban	2007	Line		696	1,044	1,392
		Rate (HHs)	607	3.9	18.8	36.3
		Rate (people)		6.9	28.6	51.0
Rural	2007	Line		696	1,044	1,392
		Rate (HHs)	547	22.1	44.3	67.4
		Rate (people)		33.7	60.3	80.2
All	2007	Line		696	1,044	1,392
		Rate (HHs)	1,154	18.1	38.6	60.4
		Rate (people)		27.5	52.9	73.4
Urban	2014	Line		926	1,389	1,851
		Rate (HHs)	421	4.2	16.0	31.8
		Rate (people)		8.0	26.7	49.1
Rural	2014	Line		926	1,389	1,851
		Rate (HHs)	378	16.8	37.2	53.9
		Rate (people)		26.0	52.5	67.2
All	2014	Line		926	1,389	1,851
		Rate (HHs)	799	11.2	27.9	44.1
		Rate (people)		18.2	41.4	59.4

Source and definitions: See Table 1 and text.

Table 2 (Sud-Ouest): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all in 2007 and 2014

Region	Year	Line/rate	n	Poverty lines and poverty rates (%)					
				Intl. 2005 PPP lines				Intl. 2011 PPP lines	
				$1.25	**$2.00**	**$2.50**	**$5.00**	**$1.90**	**$3.10**
Urban	2007	Line		413	660	825	1,650	411	671
		Rate (HHs)	607	0.9	10.9	18.9	60.6	0.9	10.9
		Rate (people)		1.9	18.5	31.5	78.1	1.9	18.5
Rural	2007	Line		413	660	825	1,650	411	671
		Rate (HHs)	547	10.7	32.1	47.7	83.7	10.7	34.0
		Rate (people)		19.4	50.5	63.8	92.4	19.4	51.9
All	2007	Line		413	660	825	1,650	411	671
		Rate (HHs)	1,154	8.6	27.4	41.3	78.6	8.6	28.8
		Rate (people)		15.3	43.0	56.3	89.1	15.3	44.1
Urban	2014	Line		483	772	965	1,930	481	784
		Rate (HHs)	421	0.8	5.1	10.8	47.0	0.8	5.5
		Rate (people)		1.8	9.8	19.1	67.4	1.8	10.6
Rural	2014	Line		483	772	965	1,930	481	784
		Rate (HHs)	378	6.9	21.1	31.9	68.9	6.9	21.5
		Rate (people)		13.0	33.1	47.4	85.3	13.0	33.8
All	2014	Line		483	772	965	1,930	481	784
		Rate (HHs)	799	4.2	14.1	22.6	59.2	4.2	14.5
		Rate (people)		8.1	23.0	35.1	77.5	8.1	23.7

Source and definitions: See Table 1 and text.

Table 2 (Sud-Ouest): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all in 2007 and 2014

Region	Year	Line/rate	n	Poverty lines and poverty rates (%)					
				Poorest half of people below 100% Natl. line	Percentile-based lines				
					20th	40th	50th	60th	80th
Urban	2007	Line		384	385	560	675	816	1,258
		Rate (HHs)	607	0.5	0.5	3.9	7.9	13.8	38.2
		Rate (people)		1.0	1.0	6.9	13.2	23.4	55.6
Rural	2007	Line		384	385	560	675	816	1,258
		Rate (HHs)	547	6.4	6.4	19.4	27.6	40.8	67.9
		Rate (people)		12.7	12.7	33.4	44.8	58.4	83.4
All	2007	Line		384	385	560	675	816	1,258
		Rate (HHs)	1,154	5.1	5.1	16.0	23.3	34.8	61.3
		Rate (people)		10.0	10.0	27.3	37.4	50.3	76.9
Urban	2014	Line		427	441	742	928	1,158	1,841
		Rate (HHs)	421	0.8	0.8	4.2	8.3	19.0	40.9
		Rate (people)		1.8	1.8	8.0	15.0	32.1	61.9
Rural	2014	Line		427	441	742	928	1,158	1,841
		Rate (HHs)	378	2.3	3.1	17.0	29.2	40.1	66.3
		Rate (people)		5.3	6.6	27.5	43.9	56.2	83.0
All	2014	Line		427	441	742	928	1,158	1,841
		Rate (HHs)	799	1.7	2.1	11.4	20.0	30.8	55.1
		Rate (people)		3.7	4.5	19.1	31.4	45.8	73.9

Source and definitions: See Table 1 and text.

Table 3: Poverty indicators

Uncertainty coefficient	Indicator (Responses ordered starting with those linked with higher poverty likelihoods)
2408	What is the main source of energy used by the household for lighting? (Other; Kerosene lamp, gas lamp, or generator; AES-SONEL direct, without a meter; AES-SONEL with a collective meter without divisons by user; AES-SONEL with individual meter; AES-SONELAES-SONEL with a collective meter (principal user); AES-SONEL with a collective meter with divisons by user)
2345	What is the main type of fuel used by the household for cooking? (Collected or gifted firewood; Kerosene; Purchased firewood; Charcoal, electricity, sawdust/wood chips, does not cook, or other; Gas (butane or propane)
2291	In the past seven days, how many household members had as their main occupation farming, agricultural work, animal husbandry, fishing, hunting, or forestry? (Three or more; Two; One; None)
2167	What is the main material of the floor of the residence? (Dirt; Cement, wood, or other; Tile/marble)
2093	What was the main occupation of the female head/spouse in the past seven days or her usual occupation? (Farmer, other agricultural worker, or worker in animal husbandry, fishing, hunting, or forestry; Craftswoman or manufacturing worker; Does not work; Personal-service worker, or retail and sales worker; No female head/spouse; Manager, director, board member, or other in management or leadership, professional or scientist, middle manager, clerk or technician, or armed forces and security)
2023	What is the main material of the walls of the residence? (Earth/unbaked bricks, or cut or uncut stone; Mud/clay, matting/thatch/metal sheets/leaves, or other; *Carabot*; Planks; Concrete/cinder blocks/baked bricks)
1824	Does the (oldest) female head/spouse know how to read and write a simple sentence in French or English? (No; Only English; No female head/spouse; Only French, or French and English)
1786	What is the tenancy status of the household in its residence? (Owner without title; Housed by a relative or friend, housed by an employer, or other; Owner with title; Renter, or rent-to-own)
1777	In the past 12 months, has any member of the household been a farmer or has cultivated agricultural land? (Yes, as an owner; Yes, as a sharecropper; Yes, as a labourer; No)

Table 3 (cont.): Poverty indicators

Uncertainty coefficient	Indicator (Responses ordered starting with those linked with higher poverty likelihoods)
1769	Does the household have a stove or gas stove? (No; Yes)
1766	Does the household have a television, VCR or DVD, or satellite dish? (No television (regardless of others); Only television; Television and VCR or DVD (without satellite dish); Television and satellite dish (regardless VCR or DVD))
1762	Does the household have a LPG cylinder? (No; Yes)
1749	Does the household have a television set? (No ; Yes)
1664	What type of toilet arrangement does the household use? (None/bush/field, bucket, latrine over water, composting toilet, or other; Pit latrine without a slab/open pit; Pit latrine with a slab, improved ventilated pit latrine, or flush toilet (with or without a water tank))
1598	In the past seven days, how many household members in their main occupation had the occupational status of self-employed without employees, unpaid family worker, apprentice (paid or unpaid), or intern? (Four or more; Three; Two; One; None)
1594	Does the household have an electric iron? (No; Yes)
1554	What is the main material of the roof of the residence? (Matting/thatch/metal sheets/leaves, earth, or other; Tile/metal sheets, or cement)
1537	Do all household members age 6 to 16 currently go to school? (No; Yes; No members ages 6 to 16)
1518	What is the female head/spouse's occupational type in her main occupation? (Unpaid family worker; Self-employed without employees; Does not work; Manual laborer, business owner with employees, apprentice (paid or unpaid), intern, or other; No female head/spouse; Upper-level manager, engineer, or similar, middle-level manager or technician, highly skilled salaried worker or laborer, or low-skilled salaried worker or laborer)
1513	Do all household members age 6 to 15 currently go to school? (No; Yes; No members ages 6 to 15)
1503	How does the household dispose of its garbage? (Recycled; Buried/burned; Thrown on the ground; Other; Trash truck or dumpster)
1487	Do all household members age 6 to 17 currently go to school? (No; Yes; No members ages 6 to 17)

Table 3 (cont.): Poverty indicators

Uncertainty coefficient	Indicator (Responses ordered starting with those linked with higher poverty likelihoods)
1454	Do all household members age 6 to 13 currently go to school? (No; Yes; No members ages 6 to 13)
1438	Do all household members age 6 to 12 currently go to school? (No; Yes; No members ages 6 to 12)
1430	What type of residence does the household have? (Observe and record the type of residence) (*Concession*/*saré*/shack/cabin/tent/hut; Detached house; House divided into several residences; Apartment in an apartment building, modern villa, or other)
1425	Do all household members age 6 to 14 currently go to school? (No; Yes; No members ages 6 to 14)
1410	Do all household members age 6 to 11 currently go to school? (No; Yes; No members ages 6 to 11)
1395	What is the main source of drinking water for the household? (Surface water (river, stream, reservoir, lake, or irrigation canal); Unprotected wells; Pumped from a well, rainwater, or other; Protected wells; Bore hole; Unprotected spring; Public standpipe; Shared tap from a source other than SNEC/CAMWATER/CDE nor a public standpipe, protected spring, or private tap from a source other than SNEC/CAMWATER/CDE; Water vendor who resells tap water from SNEC/CAMWATER/CDE, cart with a small tank or barrel, or water truck; Private tap from SNEC/CAMWATER/CDE, shared tap from SNEC/CAMWATER/CDE (household is the principal user), shared tap from SNEC/CAMWATER/CDE with individual meters, shared tap from SNEC/CAMWATER/CDE without individual meters, bagged water, or bottled water)
1391	Combien de membres du ménage sont âgés 16 ans ou moins ? (Cinq ou plus ; Quatre ; Trois ; Deux ; Un ; Aucun) How many household members are 16-years-old or younger? (Five or more; Four; Three; Two; One; None)
1388	How many household members are 17-years-old or younger? (Five or more; Four; Three; Two; One; None)
1384	Do all household members age 6 to 18 currently go to school? (No; Yes; No members ages 6 to 18)
1369	How many household members are 18-years-old or younger? (Six or more; Five; Four; Three; Two; One; None)
1355	How many household members are 15-years-old or younger? (Five or more; Four; Three; Two; One; None)
1308	How many household members are 14-years-old or younger? (Five or more; Four; Three; Two; One; None)

Table 3 (cont.): Poverty indicators

Uncertainty coefficient	Indicator (Responses ordered starting with those linked with higher poverty likelihoods)
1295	Does the household have a gas stove? (No; Yes)
1278	How many household members are 12-years-old or younger? (Four or more; Three; Two; One; None)
1277	How many household members are 13-years-old or younger? (Four or more; Three; Two; One; None)
1270	How many members does the household have? (Eight or more; Seven; Six; Five; Four; Three; Two; One)
1204	What was the main occupation of the male head/spouse in the past seven days or his usual occupation? (Farmer, other agricultural worker, or worker in animal husbandry, fishing, hunting, or forestry; Craftswoman or manufacturing worker; Does not work; Personal-service worker, or retail and sales worker; No male head/spouse; Professional or scientist, or middle manager; Manager, director, board member, or other in management or leadership, clerk or technician, or armed forces and security)
1191	How many household members are 11-years-old or younger? (Four or more; Three; Two; One; None)
1095	How does the household dispose of its waste water? (Dumped on the ground; Dumped in the yard; Drained into a gutter or ditch, or dumped in a river or stream; Drained into a septic tank/sump, or other)
1082	How many mobile phones does the household have? (None; One; Two; Three or more)
1025	Can the male head/spouse read and write a simple sentence in French or English? (No; Only French; Only English; No male head/spouse; Both)
1008	Does at least one member of the household have land used for agriculture (farming or livestock and so on)? (Yes; No)
1001	Does the household have a fan? (No; Yes)
975	In the past seven days, how many household members in their main occupation had the occupational status of self-employed without employees? (Three or more; Two; One; None)
956	In the past seven days, how many household members worked at least one hour in self-employment, as a paid or unpaid employee, as an apprentice, or as an unpaid family worker? (Four or more; Three; Two; One; None)
948	Does the household have a VCR or DVD? (No; Yes)

Table 3 (cont.): Poverty indicators

Uncertainty coefficient	Indicator (Responses ordered starting with those linked with higher poverty likelihoods)
895	What is the marital status of the female head/spouse? (Polygamously married; Monogamously married; Widow; Divorced or separated; Never-married; Cohabiting; No female head/spouse)
854	Does your household currently have a living room (salon) or dining room? (No; Yes)
758	What is the marital status of the male head/spouse? (Polygamously married; Monogamously married; No male head/spouse; Widower, or divorced or separated; Cohabiting; Never-married)
747	Does the household have a refrigerator? (No; Yes)
745	In the past seven days, has the female head/spouse worked at least one hour in self-employment, as a paid or unpaid employee, as an apprentice, or as an unpaid family worker? (Yes; No; No female head/spouse)
741	How many household members are 6-years-old or younger? (Three or more; Two; One; None)
723	Does the household have a radio or a hi-fi stereo system? (No; Only radio; Hi-fi stereo (regardless of radio))
691	What is the male head/spouse's occupational type in his main occupation? (Self-employed without employees; No male head/spouse; Does not work, unpaid family worker, apprentice (paid or unpaid), intern, or other; Manual laborer, or low-skilled salaried worker or laborer; Business owner with employees, or highly skilled salaried worker or laborer; Upper-level manager, engineer, or similar, or middle-level manager or technician)
638	Does the household have a computer? (No; Yes)
605	Does the household have a hi-fi stereo system? (No; Yes)
533	Does the household have an automobile, motorcycle/scooter, or bicycle? (No; Only bicycle; Motorcycle/scooter, without automobile (regardless of bicycle); Automobile (regardless of others))
480	Does the household currently possess any cupboards, chests of drawers, or wardrobes? (No; Yes)
462	Does the household have a kerosene/paraffin/petroleum stove? (No; Yes)
458	Do you share a toilet arrangement with anyone who is not a member of your household? (Yes, or no toilet arrangement/bush/field; No)
406	How many rooms does the household usually use for sleeping? (One; Two; Three; Four or more)

Table 3 (cont.): Poverty indicators

Uncertainty coefficient	Indicator (Responses ordered starting with those linked with higher poverty likelihoods)
403	Does the household have a mill? (No; Yes)
392	Does the household have a stove? (No; Yes)
334	What type of road is mainly used to get to the residence? (Footpath, or other; Unpaved road; Paved road)
302	How many rooms does the residence have? (One; Two; Three; Four; Five; Six or more)
276	In the past seven days, did the male head/spouse or the female head/spouse in their main occupation hadve the occupational status of self-employed without employees in a sector other than farming, agricultural work, animal husbandry, fishing, hunting, or forestry? (No; Yes)
252	Does the household have a bicycle? (Yes; No)
219	Does the household have a vehicle? (No; Yes)
206	What is the area of your residence in meters squared? (1 to 15; 16 to 20; 21 to 30; 31 to 40; 41 to 50; 51 to 70; 71 to 80; 81 to 100; 101 to 150; 151 or more)
196	Does the household have a radio? (No; Yes)
93	Does the household have a satellite dish? (No; Yes)
48	In the past seven days, has the male head/spouse worked at least one hour in self-employment, as a paid or unpaid employee, as an apprentice, or as an unpaid family worker? (Yes; No male head/spouse; No)
39	On what type of geologic features is the residence built? (In a plain or more or less flat area, or on the side of a mountain or hill; On top of a mountain or hill, or in a valley, bottom lands, or swamp; Other)
28	Does the household have a motorcycle or scooter? (No; Yes)
22	Does the household have a pushcart/wagon/wheelbarrow? (No; Yes)
2	Is there a fence or other enclosure around your residence? (No; Yes)
1	Are any household members handicapped? (Yes; No)

Source: 2014 ECAM with 100% of the national poverty line

Tables for
100% of the National Poverty Line

(and Tables Pertaining
to All Poverty Lines)

Table 4 (100% of the national line): Estimated poverty likelihoods associated with scores

If a household's score is . . .	. . . then the likelihood (%) of being below the poverty line is:
0–4	95.4
5–9	93.4
10–14	88.4
15–19	75.3
20–24	64.8
25–29	51.3
30–34	36.9
35–39	21.7
40–44	14.2
45–49	5.8
50–54	4.0
55–59	1.3
60–64	0.5
65–69	0.4
70–74	0.0
75–79	0.0
80–84	0.0
85–89	0.0
90–94	0.0
95–100	0.0

Table 5 (100% of the national line): Derivation of estimated poverty likelihoods associated with scores

Score	Households in range and < poverty line		All households in range		Poverty likelihood (%)
0–4	1,570	÷	1,645	=	95.4
5–9	1,940	÷	2,077	=	93.4
10–14	3,590	÷	4,062	=	88.4
15–19	4,066	÷	5,403	=	75.3
20–24	5,039	÷	7,776	=	64.8
25–29	4,013	÷	7,824	=	51.3
30–34	2,975	÷	8,063	=	36.9
35–39	1,452	÷	6,678	=	21.7
40–44	1,037	÷	7,328	=	14.2
45–49	409	÷	7,075	=	5.8
50–54	264	÷	6,644	=	4.0
55–59	83	÷	6,523	=	1.3
60–64	32	÷	6,598	=	0.5
65–69	24	÷	5,844	=	0.4
70–74	0	÷	6,456	=	0.0
75–79	0	÷	4,449	=	0.0
80–84	0	÷	2,878	=	0.0
85–89	0	÷	1,996	=	0.0
90–94	0	÷	629	=	0.0
95–100	0	÷	51	=	0.0

Number of all households normalized to sum to 100,000.

Table 6 (100% of the national line): Average errors (differences between estimated and observed poverty likelihoods) for households by score range, with confidence intervals, from 1,000 bootstraps of n = 16,384, 2014 scorecard applied to the 2014 validation sample

	Difference between estimate and true value			
		Confidence interval (±percentage points)		
Score	Diff.	90-percent	95-percent	99-percent
0–4	–1.8	1.6	1.7	2.2
5–9	+0.1	2.2	2.6	3.7
10–14	–2.7	2.2	2.3	2.6
15–19	–3.9	3.1	3.4	3.8
20–24	–3.3	2.8	3.1	3.6
25–29	–1.0	2.7	3.2	4.1
30–34	+1.0	2.5	2.9	3.9
35–39	–8.9	5.8	6.0	6.5
40–44	+1.4	1.9	2.3	3.0
45–49	–1.2	1.2	1.5	1.9
50–54	+0.5	0.8	1.0	1.3
55–59	–0.8	0.8	0.9	1.2
60–64	+0.3	0.1	0.2	0.2
65–69	+0.1	0.2	0.3	0.3
70–74	0.0	0.0	0.0	0.0
75–79	0.0	0.0	0.0	0.0
80–84	0.0	0.0	0.0	0.0
85–89	0.0	0.0	0.0	0.0
90–94	0.0	0.0	0.0	0.0
95–100	0.0	0.0	0.0	0.0

Table 7 (100% of the national line): Errors (average differences between estimated poverty rates and observed rates) for groups at a point in time by sample size, with confidence intervals, for 1,000 bootstraps of various sample sizes, 2014 scorecard applied to the 2014 validation sample

Sample Size	Difference between estimate and true value			
		Confidence interval (±percentage points)		
n	Diff.	90-percent	95-percent	99-percent
1	–2.0	57.2	71.5	88.0
4	–1.7	29.6	37.6	51.1
8	–1.3	20.3	24.7	29.2
16	–0.7	14.7	17.2	20.7
32	–0.9	10.0	12.7	17.0
64	–1.0	7.5	8.9	12.2
128	–1.1	5.5	6.5	8.1
256	–1.0	3.8	4.7	6.0
512	–1.1	2.6	3.1	4.2
1,024	–1.1	1.9	2.2	2.9
2,048	–1.1	1.3	1.6	2.0
4,096	–1.1	0.9	1.1	1.4
8,192	–1.1	0.7	0.8	1.0
16,384	–1.1	0.4	0.5	0.7

Table 8 (National poverty lines): Errors (average differences between estimated poverty rates and observed rates) for groups of households at a point in time, precision, and the α factor for precision, 2014 scorecard applied to the 2014 validation sample

	Poverty lines		
	National lines		
	100%	**150%**	**200%**
Error (estimate minus true value)	–1.1	–0.3	+0.4
Precision of difference	0.4	0.5	0.5
α factor for precision	0.81	0.73	0.76

Results pertain to the 2014 scorecard applied to the 2014 validation sample.

Differences between estimates and true values are displayed in units of percentage points.

Precision is measured as 90-percent confidence intervals in units of ± percentage points.

Differences and precision estimated from 1,000 bootstraps with n = 16,384.

α is estimated from 1,000 bootstrap samples of n = 256, 512, 1,024, 2,048, 4,096, 8,192, and 16,384.

Table 8 (International 2005 and 2011 PPP poverty lines): Errors (average differences between estimated poverty rates and observed rates) for groups of households at a point in time, precision, and the α factor for precision, 2014 scorecard applied to the 2014 validation sample

	Poverty lines					
	Intl. 2005 PPP lines				Intl. 2011 PPP lines	
	$1.25	**$2.00**	**$2.50**	**$5.00**	**$1.90**	**$3.10**
Error (estimate minus true value)	–1.7	–0.9	–0.4	+2.0	–1.7	–1.3
Precision of difference	0.5	0.4	0.4	0.5	0.4	0.5
α factor for precision	0.98	0.76	0.69	0.83	0.98	0.77

Results pertain to the 2014 scorecard applied to the 2014 validation sample.

Differences between estimates and true values are displayed in units of percentage points.

Precision is measured as 90-percent confidence intervals in units of ± percentage points.

Differences and precision estimated from 1,000 bootstraps with n = 16,384.

α is estimated from 1,000 bootstrap samples of n = 256, 512, 1,024, 2,048, 4,096, 8,192, and 16,384.

Table 8 (Relative and percentile-based poverty lines): Errors (average differences between estimated poverty rates and observed rates) for groups of households at a point in time, precision, and the α factor for precision, 2014 scorecard applied to the 2014 validation sample

	Poverty lines					
	Poorest half of people below 100% Natl. line	**20th**	**40th**	**50th**	**60th**	**80th**
Error (estimate minus true value)	–1.3	–1.5	–0.9	–1.4	–0.2	+1.1
Precision of difference	0.4	0.4	0.4	0.4	0.4	0.5
α factor for precision	1.06	1.02	0.76	0.70	0.68	0.81

Results pertain to the 2014 scorecard applied to the 2014 validation sample.

Differences between estimates and true values are displayed in units of percentage points.

Precision is measured as 90-percent confidence intervals in units of ± percentage points.

Differences and precision estimated from 1,000 bootstraps with n = 16,384.

α is estimated from 1,000 bootstrap samples of n = 256, 512, 1,024, 2,048, 4,096, 8,192, and 16,384.

Table 9 (National poverty lines): Errors (average differences between estimated changes in poverty rates and observed changes) for groups of households at two points in time, precision, and the α factor for precision, 2014 scorecard applied to the 2007 and 2014 validation samples

	Poverty lines		
	National lines		
	100%	**150%**	**200%**
Error (estimate minus true value)	+5.5	+1.4	+0.5
Precision of difference	0.8	0.7	0.7
α factor for precision	0.94	0.81	0.78

New 2014 scorecard applied to the 2014 validation sample (baseline) and 2007 validation sample (follow-up).
Differences between estimates and true values are displayed in units of percentage points.
Precision is measured as 90-percent confidence intervals in units of ± percentage points.
Differences and precision estimated from 1,000 bootstraps with n = 16,384.
α is estimated from 1,000 bootstrap samples of n = 256, 512, 1,024, 2,048, 4,096, 8,192, and 16,384.

Table 9 (International 2005 and 2011 PPP poverty lines): Errors (average differences between estimated changes in poverty rates and observed changes) for groups of households at two points in time, precision, and the α factor for precision, 2014 scorecard applied to the 2007 and 2014 validation samples

	Seuils de pauvreté					
	Seuils Intl. 2005 PPA				Seuils Intl. 2011 PPA	
	$1,25	**$2,00**	**$2,50**	**$5,00**	**$1,90**	**$3,10**
Ecart entre valeur estimée et réelle	+1.4	–1.7	–4.0	–4.9	+1.5	–1.7
Précision de l'écart	0.7	0.7	0.7	0.7	0.7	0.8
Facteur α	1.09	0.87	0.75	0.83	1.08	0.88

Grille de 2014 applié avec les échantillons de validation de 2014 (base) et 2007 (suite)

Les écarts entre les valeurs estimées et réeles sont exprimés en unités de points de pourcentage.

La précision a un niveau de confiance de 90 pour cent et exprimée en unités de ± points de pourcentage.

Les écarts et la précision des écarts sont estimés à partir de 1 000 échantillons de type bootstrap (n = 16.384).

Le factor α est calculé avec 1.000 échantillons de type bootstrap n = 256, 512, 1.024, 2.048, 4.096, 8.192 et 16.384.

Table 10 (All poverty lines): Possible targeting outcomes

True poverty status	Targeting segment: Targeted	Targeting segment: Non-targeted
Below poverty line	**Inclusion** Below poverty line correctly targeted	**Undercoverage** Below poverty line mistakenly not targeted
Above poverty line	**Leakage** Above poverty line mistakenly targeted	**Exclusion** Above poverty line correctly not targeted

Table 11 (100% of the national line): Percentages of households by cut-off score and targeting classification, along with the hit rate and BPAC, 2014 scorecard applied to the 2014 validation sample

Targeting cut-off	Inclusion: Below poverty line correctly targeted	Undercoverage: Below poverty line mistakenly not targeted	Leakage: Above poverty line mistakenly targeted	Exclusion: Above poverty line correctly not targeted	Hit rate Inclusion + Exclusion	BPAC See text
<=4	1.6	25.0	0.1	73.3	74.9	–87.9
<=9	3.5	23.1	0.2	73.1	76.6	–72.9
<=14	7.0	19.6	0.7	72.6	79.7	–44.3
<=19	11.1	15.5	2.1	71.3	82.4	–8.7
<=24	16.1	10.6	4.9	68.5	84.5	+39.1
<=29	20.0	6.7	8.8	64.6	84.5	+66.8
<=34	22.7	3.9	14.1	59.2	82.0	+46.9
<=39	24.6	2.0	18.9	54.4	79.0	+28.8
<=44	25.5	1.1	25.3	48.1	73.6	+4.9
<=49	26.1	0.5	31.8	41.6	67.7	–19.5
<=54	26.4	0.2	38.2	35.2	61.7	–43.3
<=59	26.6	0.1	44.5	28.8	55.4	–67.3
<=64	26.6	0.0	51.1	22.3	48.9	–92.0
<=69	26.6	0.0	56.9	16.5	43.1	–113.9
<=74	26.6	0.0	63.4	10.0	36.6	–138.1
<=79	26.6	0.0	67.8	5.6	32.2	–154.8
<=84	26.6	0.0	70.7	2.7	29.3	–165.6
<=89	26.6	0.0	72.7	0.7	27.3	–173.1
<=94	26.6	0.0	73.3	0.1	26.7	–175.5
<=100	26.6	0.0	73.4	0.0	26.6	–175.7

Inclusion, undercoverage, leakage, and exclusion normalized to sum to 100.

Table 12 (100% of the national line): Share of all households who are targeted (that is, score at or below a cut-off), the share of targeted households who are poor, the share of poor households who are targeted, and the number of poor households who are successfully targeted (inclusion) per non-poor household mistakenly targeted (leakage), 2014 scorecard applied to the 2014 validation sample

Point de coupure	% ménages ciblés	% ciblés qui sont pauvres	% pauvres qui sont ciblés	Ménages pauvres ciblés par ménage non pauvre ciblé
<=4	1.6	95.5	5.9	21.1:1
<=9	3.7	93.7	13.1	15.0:1
<=14	7.8	90.5	26.5	9.5:1
<=19	13.2	84.3	41.8	5.4:1
<=24	21.0	76.6	60.3	3.3:1
<=29	28.8	69.3	75.0	2.3:1
<=34	36.9	61.6	85.3	1.6:1
<=39	43.5	56.5	92.4	1.3:1
<=44	50.9	50.2	96.0	1.0:1
<=49	57.9	45.1	98.1	0.8:1
<=54	64.6	40.9	99.3	0.7:1
<=59	71.1	37.4	99.8	0.6:1
<=64	77.7	34.2	99.9	0.5:1
<=69	83.5	31.9	100.0	0.5:1
<=74	90.0	29.6	100.0	0.4:1
<=79	94.4	28.2	100.0	0.4:1
<=84	97.3	27.3	100.0	0.4:1
<=89	99.3	26.8	100.0	0.4:1
<=94	99.9	26.6	100.0	0.4:1
<=100	100.0	26.6	100.0	0.4:1

Tables for
150% of the National Poverty Line

Table 4 (150% of national line): Estimated poverty likelihoods associated with scores

Score	Probabilité que le ménage ait de dépenses de consommation en dessous du seuil de pauvreté
0–4	99.1
5–9	96.1
10–14	96.1
15–19	93.0
20–24	88.2
25–29	77.1
30–34	66.3
35–39	54.3
40–44	39.3
45–49	24.1
50–54	20.0
55–59	11.5
60–64	6.1
65–69	6.1
70–74	4.0
75–79	0.4
80–84	0.0
85–89	0.0
90–94	0.0
95–100	0.0

Table 6 (150% of national line): Average errors (differences between estimated and observed poverty likelihoods) for households by score range, with confidence intervals, from 1,000 bootstraps of n = 16,384, 2014 scorecard applied to the 2014 validation sample

	Ecart entre valeur estimée et réelle			
		Intervalle de confiance (±points de pourcentage)		
Score	Ecart	90 pour cent	95 pour cent	99 pour cent
0–4	–0.9	0.4	0.4	0.4
5–9	–1.3	1.4	1.7	2.4
10–14	–2.3	1.5	1.6	1.7
15–19	+2.3	1.7	2.1	2.8
20–24	–1.1	1.5	1.9	2.5
25–29	–8.2	5.0	5.1	5.5
30–34	+2.2	2.5	3.0	3.9
35–39	–6.1	4.4	4.8	5.5
40–44	+3.1	2.6	3.2	4.1
45–49	–0.6	2.3	2.8	4.0
50–54	+6.0	1.8	2.2	2.8
55–59	–0.8	2.0	2.3	3.3
60–64	–0.4	1.4	1.6	2.2
65–69	+0.4	1.3	1.5	2.0
70–74	+2.9	0.5	0.6	0.8
75–79	+0.4	0.0	0.0	0.0
80–84	–1.1	1.0	1.1	1.3
85–89	0.0	0.0	0.0	0.0
90–94	0.0	0.0	0.0	0.0
95–100	0.0	0.0	0.0	0.0

Table 7 (150% of national line): Errors (average differences between estimated poverty rates and observed rates) for groups at a point in time by sample size, with confidence intervals, for 1,000 bootstraps of various sample sizes, 2014 scorecard applied to the 2014 validation sample

Taille de l'échantillon	Ecart entre valeur estimée et réelle			
		Intervalle de confiance (±points de pourcentage)		
n	Ecart	90 pour cent	95 pour cent	99 pour cent
1	–1.0	71.1	78.5	93.4
4	–0.8	31.4	38.3	48.8
8	–0.7	22.6	27.0	35.2
16	–0.5	14.9	17.6	22.3
32	–0.5	10.5	12.0	16.4
64	–0.4	7.4	8.9	11.5
128	–0.3	5.3	6.1	8.0
256	–0.4	3.7	4.3	5.7
512	–0.3	2.7	3.1	4.0
1,024	–0.3	1.9	2.2	2.8
2,048	–0.3	1.3	1.5	2.1
4,096	–0.3	0.9	1.1	1.5
8,192	–0.3	0.6	0.8	1.0
16,384	–0.3	0.5	0.6	0.8

Table 11 (150% of national line): Percentages of households by cut-off score and targeting classification, along with the hit rate and BPAC, 2014 scorecard applied to the 2014 validation sample

Point de coupure	Inclusion: <Seuil de pauvreté judicieusement ciblé	Défaut de couverture: <Seuil de pauvreté par erreur non ciblé	Fuite: >=Seuil de pauvreté par erreur ciblé	Exclusion: >=Seuil de pauvreté judicieusement non ciblé	Taux de succès: Inclusion + Exclusion	BPAC Voir texte
<=4	1.6	41.1	0.0	57.3	58.9	–92.3
<=9	3.7	39.1	0.1	57.2	60.9	–82.7
<=14	7.6	35.1	0.2	57.1	64.8	–63.9
<=19	12.5	30.2	0.7	56.6	69.1	–39.8
<=24	19.3	23.4	1.7	55.6	74.9	–5.8
<=29	25.7	17.0	3.1	54.2	80.0	+27.6
<=34	30.9	11.8	5.9	51.4	82.3	+58.7
<=39	34.9	7.8	8.6	48.7	83.6	+79.9
<=44	37.9	4.9	13.0	44.3	82.1	+69.6
<=49	39.8	2.9	18.1	39.2	79.0	+57.6
<=54	41.0	1.7	23.6	33.7	74.7	+44.8
<=59	41.8	0.9	29.3	28.0	69.7	+31.4
<=64	42.2	0.5	35.5	21.8	64.0	+17.0
<=69	42.6	0.1	40.9	16.3	59.0	+4.2
<=74	42.7	0.0	47.3	10.0	52.7	–10.7
<=79	42.7	0.0	51.8	5.5	48.2	–21.2
<=84	42.7	0.0	54.6	2.7	45.4	–27.8
<=89	42.7	0.0	56.6	0.7	43.4	–32.5
<=94	42.7	0.0	57.2	0.1	42.8	–34.0
<=100	42.7	0.0	57.3	0.0	42.7	–34.1

Inclusion, défaut de couverture, fuite, et exclusion normalisés à 100.

Table 12 (150% of national line): Share of all households who are targeted (that is, score at or below a cut-off), the share of targeted households who are poor, the share of poor households who are targeted, and the number of poor households who are successfully targeted (inclusion) per non-poor household mistakenly targeted (leakage), 2014 scorecard applied to the 2014 validation sample

Point de coupure	% ménages ciblés	% ciblés qui sont pauvres	% pauvres qui sont ciblés	Ménages pauvres ciblés par ménage non pauvre ciblé
<=4	1.6	100.0	3.9	Uniquemente pauvres ciblés
<=9	3.7	98.5	8.6	66.9:1
<=14	7.8	98.1	17.9	50.4:1
<=19	13.2	94.9	29.3	18.5:1
<=24	21.0	92.0	45.1	11.5:1
<=29	28.8	89.4	60.2	8.4:1
<=34	36.9	84.0	72.4	5.2:1
<=39	43.5	80.3	81.8	4.1:1
<=44	50.9	74.4	88.6	2.9:1
<=49	57.9	68.7	93.2	2.2:1
<=54	64.6	63.5	96.0	1.7:1
<=59	71.1	58.8	97.8	1.4:1
<=64	77.7	54.3	98.9	1.2:1
<=69	83.5	51.0	99.7	1.0:1
<=74	90.0	47.4	99.9	0.9:1
<=79	94.4	45.2	99.9	0.8:1
<=84	97.3	43.9	100.0	0.8:1
<=89	99.3	43.0	100.0	0.8:1
<=94	99.9	42.7	100.0	0.7:1
<=100	100.0	42.7	100.0	0.7:1

Tables for
200% of the National Poverty Line

Table 4 (200% of national line): Estimated poverty likelihoods associated with scores

Score	Probabilité que le ménage ait de dépenses de consommation en dessous du seuil de pauvreté
0–4	100.0
5–9	99.8
10–14	99.1
15–19	98.9
20–24	95.7
25–29	92.6
30–34	85.5
35–39	72.8
40–44	66.2
45–49	57.0
50–54	43.9
55–59	27.5
60–64	20.0
65–69	16.1
70–74	11.2
75–79	4.3
80–84	1.0
85–89	0.0
90–94	0.0
95–100	0.0

Table 6 (200% of national line): Average errors (differences between estimated and observed poverty likelihoods) for households by score range, with confidence intervals, from 1,000 bootstraps of n = 16,384, 2014 scorecard applied to the 2014 validation sample

	Ecart entre valeur estimée et réelle			
		Intervalle de confiance (±points de pourcentage)		
Score	Ecart	90 pour cent	95 pour cent	99 pour cent
0–4	0.0	0.0	0.0	0.0
5–9	+0.1	0.3	0.4	0.4
10–14	+0.3	0.7	0.8	1.1
15–19	–0.7	0.5	0.5	0.5
20–24	–1.1	0.9	1.0	1.2
25–29	–2.7	1.8	1.9	2.1
30–34	–3.6	2.6	2.7	3.0
35–39	–7.6	5.0	5.2	5.5
40–44	+3.1	2.6	3.1	4.3
45–49	+5.8	3.0	3.7	4.9
50–54	+12.8	2.6	3.0	3.9
55–59	–3.2	3.1	3.3	4.3
60–64	–1.2	2.3	2.7	3.4
65–69	+1.5	2.2	2.5	3.3
70–74	+4.6	1.4	1.7	2.4
75–79	+1.3	1.1	1.2	1.7
80–84	–0.2	0.9	1.0	1.3
85–89	–0.6	0.6	0.7	0.8
90–94	0.0	0.0	0.0	0.0
95–100	0.0	0.0	0.0	0.0

Table 7 (200% of national line): Errors (average differences between estimated poverty rates and observed rates) for groups at a point in time by sample size, with confidence intervals, for 1,000 bootstraps of various sample sizes, 2014 scorecard applied to the 2014 validation sample

Taille de l'échantillon	Ecart entre valeur estimée et réelle			
		Intervalle de confiance (±points de pourcentage)		
n	Ecart	90 pour cent	95 pour cent	99 pour cent
1	+0.2	61.1	82.8	90.7
4	–0.5	29.4	36.3	48.6
8	+0.3	21.1	24.2	30.4
16	+0.5	14.7	17.4	24.0
32	+0.4	10.4	12.5	16.7
64	+0.5	7.1	8.8	11.5
128	+0.5	5.2	6.2	8.1
256	+0.4	3.9	4.7	5.7
512	+0.4	2.7	3.3	4.2
1,024	+0.4	1.9	2.3	2.9
2,048	+0.4	1.3	1.5	2.1
4,096	+0.4	0.9	1.1	1.4
8,192	+0.4	0.6	0.8	1.0
16,384	+0.4	0.5	0.6	0.7

Table 11 (200% of national line): Percentages of households by cut-off score and targeting classification, along with the hit rate and BPAC, 2014 scorecard applied to the 2014 validation sample

Point de coupure	Inclusion: <Seuil de pauvreté judicieusement ciblé	Défaut de couverture: <Seuil de pauvreté par erreur non ciblé	Fuite: >=Seuil de pauvreté par erreur ciblé	Exclusion: >=Seuil de pauvreté judicieusement non ciblé	Taux de succès: Inclusion + Exclusion	BPAC Voir texte
<=4	1.6	55.0	0.0	43.4	45.0	–94.2
<=9	3.7	52.9	0.0	43.4	47.1	–86.9
<=14	7.7	48.9	0.1	43.3	51.0	–72.6
<=19	13.1	43.5	0.1	43.3	56.4	–53.6
<=24	20.5	36.1	0.4	43.0	63.5	–26.7
<=29	27.9	28.7	0.9	42.5	70.4	+0.1
<=34	34.9	21.8	2.0	41.4	76.3	+26.7
<=39	40.1	16.5	3.4	40.0	80.1	+47.8
<=44	45.0	11.6	5.9	37.5	82.4	+69.3
<=49	48.8	7.8	9.2	34.2	83.0	+83.8
<=54	51.3	5.3	13.3	30.1	81.4	+76.5
<=59	53.4	3.2	17.7	25.7	79.1	+68.8
<=64	55.0	1.6	22.7	20.7	75.8	+60.0
<=69	56.0	0.6	27.6	15.8	71.8	+51.3
<=74	56.4	0.2	33.6	9.8	66.2	+40.6
<=79	56.5	0.1	37.9	5.5	62.0	+33.0
<=84	56.6	0.0	40.7	2.7	59.2	+28.0
<=89	56.6	0.0	42.7	0.7	57.3	+24.5
<=94	56.6	0.0	43.3	0.1	56.7	+23.4
<=100	56.6	0.0	43.4	0.0	56.6	+23.3

Inclusion, défaut de couverture, fuite, et exclusion normalisés à 100.

Table 12 (200% of national line): Share of all households who are targeted (that is, score at or below a cut-off), the share of targeted households who are poor, the share of poor households who are targeted, and the number of poor households who are successfully targeted (inclusion) per non-poor household mistakenly targeted (leakage), 2014 scorecard applied to the 2014 validation sample

Point de coupure	% ménages ciblés	% ciblés qui sont pauvres	% pauvres qui sont ciblés	Ménages pauvres ciblés par ménage non pauvre ciblé
<=4	1.6	100.0	2.9	Uniquemente pauvres ciblés
<=9	3.7	99.6	6.6	248.6:1
<=14	7.8	99.1	13.6	111.2:1
<=19	13.2	99.1	23.1	113.3:1
<=24	21.0	97.9	36.3	46.5:1
<=29	28.8	96.9	49.3	30.8:1
<=34	36.9	94.6	61.6	17.4:1
<=39	43.5	92.2	70.9	11.8:1
<=44	50.9	88.4	79.4	7.6:1
<=49	57.9	84.2	86.2	5.3:1
<=54	64.6	79.4	90.6	3.9:1
<=59	71.1	75.1	94.4	3.0:1
<=64	77.7	70.8	97.2	2.4:1
<=69	83.5	67.0	98.9	2.0:1
<=74	90.0	62.7	99.6	1.7:1
<=79	94.4	59.9	99.9	1.5:1
<=84	97.3	58.1	100.0	1.4:1
<=89	99.3	57.0	100.0	1.3:1
<=94	99.9	56.6	100.0	1.3:1
<=100	100.0	56.6	100.0	1.3:1

Tables for
the $1.25/day 2005 PPP Poverty Line

Table 4 ($1.25/day 2005 PPP line): Estimated poverty likelihoods associated with scores

Score	Probabilité que le ménage ait de dépenses de consommation en dessous du seuil de pauvreté
0–4	90.1
5–9	78.1
10–14	73.6
15–19	54.3
20–24	37.7
25–29	23.5
30–34	14.8
35–39	6.4
40–44	1.4
45–49	0.7
50–54	0.4
55–59	0.1
60–64	0.0
65–69	0.0
70–74	0.0
75–79	0.0
80–84	0.0
85–89	0.0
90–94	0.0
95–100	0.0

Table 6 ($1.25/day 2005 PPP line): Average errors (differences between estimated and observed poverty likelihoods) for households by score range, with confidence intervals, from 1,000 bootstraps of n = 16,384, 2014 scorecard applied to the 2014 validation sample

	Ecart entre valeur estimée et réelle			
		Intervalle de confiance (±points de pourcentage)		
Score	Ecart	90 pour cent	95 pour cent	99 pour cent
0–4	+3.9	3.3	4.0	5.4
5–9	–5.0	4.2	4.5	5.4
10–14	+4.6	3.2	4.0	5.0
15–19	–8.7	5.8	6.0	6.5
20–24	–12.0	7.3	7.6	8.2
25–29	–1.6	2.3	2.7	3.4
30–34	+0.6	1.8	2.1	2.7
35–39	–1.8	1.7	1.8	2.2
40–44	–1.8	1.3	1.4	1.6
45–49	+0.3	0.3	0.3	0.3
50–54	+0.4	0.0	0.0	0.0
55–59	+0.1	0.0	0.0	0.0
60–64	0.0	0.1	0.1	0.1
65–69	0.0	0.0	0.0	0.0
70–74	0.0	0.0	0.0	0.0
75–79	0.0	0.0	0.0	0.0
80–84	0.0	0.0	0.0	0.0
85–89	0.0	0.0	0.0	0.0
90–94	0.0	0.0	0.0	0.0
95–100	0.0	0.0	0.0	0.0

Table 7 ($1.25/day 2005 PPP line): Errors (average differences between estimated poverty rates and observed rates) for groups at a point in time by sample size, with confidence intervals, for 1,000 bootstraps of various sample sizes, 2014 scorecard applied to the 2014 validation sample

Taille de l'échantillon	Ecart entre valeur estimée et réelle			
		Intervalle de confiance (±points de pourcentage)		
n	Ecart	90 pour cent	95 pour cent	99 pour cent
1	–2.2	50.0	69.8	85.9
4	–1.0	27.9	34.5	46.0
8	–1.1	19.3	24.1	30.3
16	–1.1	14.2	16.5	21.7
32	–1.5	9.8	11.8	15.5
64	–1.7	7.3	8.6	11.6
128	–1.6	5.1	5.9	8.0
256	–1.7	3.7	4.5	6.1
512	–1.6	2.5	3.0	4.1
1,024	–1.7	1.7	2.1	2.9
2,048	–1.7	1.3	1.5	2.0
4,096	–1.7	0.9	1.1	1.4
8,192	–1.7	0.6	0.8	1.0
16,384	–1.7	0.5	0.6	0.7

Table 11 ($1.25/day 2005 PPP line): Percentages of households by cut-off score and targeting classification, along with the hit rate and BPAC, 2014 scorecard applied to the 2014 validation sample

Point de coupure	Inclusion: <Seuil de pauvreté judicieusement ciblé	Défaut de couverture: <Seuil de pauvreté par erreur non ciblé	Fuite: >=Seuil de pauvreté par erreur ciblé	Exclusion: >=Seuil de pauvreté judicieusement non ciblé	Taux de succès: Inclusion + Exclusion	BPAC Voir texte
<=4	1.4	14.2	0.3	84.1	85.5	–80.5
<=9	3.1	12.6	0.7	83.7	86.8	–56.6
<=14	5.6	10.0	2.1	82.2	87.9	–14.0
<=19	8.7	6.9	4.5	79.9	88.6	+40.1
<=24	12.0	3.6	9.0	75.4	87.4	+42.6
<=29	13.7	1.9	15.0	69.3	83.1	+3.6
<=34	14.8	0.8	22.1	62.3	77.1	–41.3
<=39	15.3	0.3	28.2	56.2	71.5	–80.5
<=44	15.6	0.1	35.3	49.1	64.7	–126.1
<=49	15.6	0.0	42.3	42.1	57.7	–171.1
<=54	15.6	0.0	49.0	35.4	51.0	–213.7
<=59	15.6	0.0	55.5	28.9	44.5	–255.5
<=64	15.6	0.0	62.1	22.3	37.9	–297.7
<=69	15.6	0.0	67.9	16.5	32.1	–335.1
<=74	15.6	0.0	74.4	10.0	25.6	–376.4
<=79	15.6	0.0	78.8	5.6	21.2	–404.9
<=84	15.6	0.0	81.7	2.7	18.3	–423.4
<=89	15.6	0.0	83.7	0.7	16.3	–436.1
<=94	15.6	0.0	84.3	0.1	15.7	–440.2
<=100	15.6	0.0	84.4	0.0	15.6	–440.5

Inclusion, défaut de couverture, fuite, et exclusion normalisés à 100.

Table 12 ($1.25/day 2005 PPP line): Share of all households who are targeted (that is, score at or below a cut-off), the share of targeted households who are poor, the share of poor households who are targeted, and the number of poor households who are successfully targeted (inclusion) per non-poor household mistakenly targeted (leakage), 2014 scorecard applied to the 2014 validation sample

Point de coupure	% ménages ciblés	% ciblés qui sont pauvres	% pauvres qui sont ciblés	Ménages pauvres ciblés par ménage non pauvre ciblé
<=4	1.6	84.6	8.9	5.5:1
<=9	3.7	81.9	19.5	4.5:1
<=14	7.8	72.4	36.1	2.6:1
<=19	13.2	65.9	55.6	1.9:1
<=24	21.0	57.2	76.8	1.3:1
<=29	28.8	47.7	88.0	0.9:1
<=34	36.9	40.1	94.7	0.7:1
<=39	43.5	35.2	98.3	0.5:1
<=44	50.9	30.6	99.7	0.4:1
<=49	57.9	26.9	99.9	0.4:1
<=54	64.6	24.2	99.9	0.3:1
<=59	71.1	21.9	99.9	0.3:1
<=64	77.7	20.1	100.0	0.3:1
<=69	83.5	18.7	100.0	0.2:1
<=74	90.0	17.3	100.0	0.2:1
<=79	94.4	16.5	100.0	0.2:1
<=84	97.3	16.0	100.0	0.2:1
<=89	99.3	15.7	100.0	0.2:1
<=94	99.9	15.6	100.0	0.2:1
<=100	100.0	15.6	100.0	0.2:1

Tables for
the $2.00/day 2005 PPP Poverty Line

Table 4 ($2.00/day 2005 PPP line): Estimated poverty likelihoods associated with scores

Score	Probabilité que le ménage ait de dépenses de consommation en dessous du seuil de pauvreté
0–4	97.0
5–9	94.6
10–14	90.8
15–19	84.4
20–24	77.0
25–29	59.2
30–34	43.5
35–39	27.2
40–44	17.7
45–49	7.6
50–54	5.0
55–59	2.0
60–64	1.0
65–69	1.0
70–74	0.5
75–79	0.0
80–84	0.0
85–89	0.0
90–94	0.0
95–100	0.0

Table 6 ($2.00/day 2005 PPP line): Average errors (differences between estimated and observed poverty likelihoods) for households by score range, with confidence intervals, from 1,000 bootstraps of n = 16,384, 2014 scorecard applied to the 2014 validation sample

	Ecart entre valeur estimée et réelle			
		Intervalle de confiance (±points de pourcentage)		
Score	Ecart	90 pour cent	95 pour cent	99 pour cent
0–4	–3.0	1.5	1.5	1.5
5–9	–2.2	1.8	1.9	2.6
10–14	–1.6	1.7	2.0	2.5
15–19	–1.2	2.1	2.5	3.3
20–24	–0.1	2.3	2.6	3.4
25–29	–2.7	2.7	3.0	3.9
30–34	–2.1	2.5	3.1	4.0
35–39	–9.1	5.9	6.2	6.8
40–44	+2.9	1.9	2.3	3.1
45–49	+0.7	1.2	1.4	1.8
50–54	–0.4	1.2	1.4	1.8
55–59	–0.8	0.9	1.1	1.3
60–64	+0.2	0.4	0.5	0.6
65–69	+0.8	0.2	0.2	0.2
70–74	+0.5	0.0	0.0	0.0
75–79	0.0	0.0	0.0	0.0
80–84	0.0	0.0	0.0	0.0
85–89	0.0	0.0	0.0	0.0
90–94	0.0	0.0	0.0	0.0
95–100	0.0	0.0	0.0	0.0

Table 7 ($2.00/day 2005 PPP line): Errors (average differences between estimated poverty rates and observed rates) for groups at a point in time by sample size, with confidence intervals, for 1,000 bootstraps of various sample sizes, 2014 scorecard applied to the 2014 validation sample

Taille de l'échantillon	Ecart entre valeur estimée et réelle			
		Intervalle de confiance (±points de pourcentage)		
n	Ecart	90 pour cent	95 pour cent	99 pour cent
1	–1.1	66.0	74.9	89.7
4	–1.6	30.5	36.4	50.1
8	–1.2	21.4	24.9	33.2
16	–0.7	14.4	17.3	22.0
32	–0.9	10.1	11.8	15.8
64	–0.9	7.1	8.4	11.5
128	–0.9	5.0	6.2	7.8
256	–0.8	3.7	4.4	6.0
512	–0.8	2.5	3.1	3.8
1,024	–0.8	1.8	2.1	2.9
2,048	–0.9	1.2	1.5	2.0
4,096	–0.9	0.9	1.1	1.4
8,192	–0.9	0.6	0.7	1.0
16,384	–0.9	0.4	0.5	0.7

Table 11 ($2.00/day 2005 PPP line): Percentages of households by cut-off score and targeting classification, along with the hit rate and BPAC, 2014 scorecard applied to the 2014 validation sample

Point de coupure	Inclusion: <Seuil de pauvreté judicieusement ciblé	Défaut de couverture: <Seuil de pauvreté par erreur non ciblé	Fuite: >=Seuil de pauvreté par erreur ciblé	Exclusion: >=Seuil de pauvreté judicieusement non ciblé	Taux de succès: Inclusion + Exclusion	BPAC Voir texte
<=4	1.6	29.0	0.0	69.3	71.0	–89.3
<=9	3.6	27.0	0.1	69.3	72.9	–76.0
<=14	7.3	23.4	0.5	68.9	76.2	–50.8
<=19	11.8	18.8	1.3	68.0	79.8	–18.4
<=24	17.7	13.0	3.3	66.0	83.7	+25.9
<=29	22.4	8.3	6.4	62.9	85.3	+66.8
<=34	25.8	4.8	11.0	58.3	84.2	+64.1
<=39	28.1	2.5	15.4	54.0	82.1	+49.8
<=44	29.4	1.3	21.5	47.8	77.2	+29.9
<=49	30.0	0.7	28.0	41.4	71.3	+8.8
<=54	30.4	0.3	34.2	35.1	65.5	–11.6
<=59	30.6	0.1	40.5	28.8	59.4	–32.2
<=64	30.6	0.0	47.1	22.3	52.9	–53.4
<=69	30.7	0.0	52.9	16.5	47.1	–72.4
<=74	30.7	0.0	59.3	10.0	40.7	–93.5
<=79	30.7	0.0	63.8	5.6	36.2	–108.0
<=84	30.7	0.0	66.7	2.7	33.3	–117.4
<=89	30.7	0.0	68.7	0.7	31.3	–123.9
<=94	30.7	0.0	69.3	0.1	30.7	–126.0
<=100	30.7	0.0	69.3	0.0	30.7	–126.1

Inclusion, défaut de couverture, fuite, et exclusion normalisés à 100.

Table 12 ($2.00/day 2005 PPP line): Share of all households who are targeted (that is, score at or below a cut-off), the share of targeted households who are poor, the share of poor households who are targeted, and the number of poor households who are successfully targeted (inclusion) per non-poor household mistakenly targeted (leakage), 2014 scorecard applied to the 2014 validation sample

Point de coupure	% ménages ciblés	% ciblés qui sont pauvres	% pauvres qui sont ciblés	Ménages pauvres ciblés par ménage non pauvre ciblé
<=4	1.6	100.0	5.4	Uniquemente pauvres ciblés
<=9	3.7	97.9	11.9	46.9:1
<=14	7.8	93.8	23.8	15.1:1
<=19	13.2	89.8	38.6	8.8:1
<=24	21.0	84.2	57.6	5.3:1
<=29	28.8	77.7	72.9	3.5:1
<=34	36.9	70.1	84.3	2.3:1
<=39	43.5	64.7	91.8	1.8:1
<=44	50.9	57.7	95.7	1.4:1
<=49	57.9	51.7	97.7	1.1:1
<=54	64.6	47.0	99.0	0.9:1
<=59	71.1	43.0	99.7	0.8:1
<=64	77.7	39.4	99.9	0.7:1
<=69	83.5	36.7	100.0	0.6:1
<=74	90.0	34.1	100.0	0.5:1
<=79	94.4	32.5	100.0	0.5:1
<=84	97.3	31.5	100.0	0.5:1
<=89	99.3	30.9	100.0	0.4:1
<=94	99.9	30.7	100.0	0.4:1
<=100	100.0	30.7	100.0	0.4:1

Tables for
the $2.50/day 2005 PPP Poverty Line

Table 4 ($2.50/day 2005 PPP line): Estimated poverty likelihoods associated with scores

Score	Probabilité que le ménage ait de dépenses de consommation en dessous du seuil de pauvreté
0–4	99.1
5–9	97.1
10–14	95.7
15–19	91.9
20–24	86.9
25–29	75.2
30–34	61.1
35–39	46.5
40–44	31.8
45–49	18.5
50–54	13.1
55–59	6.5
60–64	3.2
65–69	3.2
70–74	1.7
75–79	0.0
80–84	0.0
85–89	0.0
90–94	0.0
95–100	0.0

Table 6 ($2.50/day 2005 PPP line): Average errors (differences between estimated and observed poverty likelihoods) for households by score range, with confidence intervals, from 1,000 bootstraps of n = 16,384, 2014 scorecard applied to the 2014 validation sample

	Ecart entre valeur estimée et réelle			
		Intervalle de confiance (±points de pourcentage)		
Score	Ecart	90 pour cent	95 pour cent	99 pour cent
0–4	–0.9	0.5	0.5	0.5
5–9	+0.4	1.5	1.9	2.6
10–14	–2.4	1.6	1.6	1.8
15–19	+1.3	1.8	2.1	2.8
20–24	–1.5	1.6	1.9	2.5
25–29	–9.5	5.6	5.7	5.9
30–34	+3.7	2.6	3.0	3.9
35–39	–8.3	5.6	6.0	6.6
40–44	+3.8	2.4	3.0	3.8
45–49	+2.1	2.0	2.4	3.0
50–54	+4.2	1.4	1.7	2.3
55–59	+0.7	1.2	1.4	1.8
60–64	–0.2	1.1	1.3	1.7
65–69	0.0	0.9	1.1	1.4
70–74	+1.2	0.3	0.3	0.4
75–79	0.0	0.0	0.0	0.0
80–84	0.0	0.0	0.0	0.0
85–89	0.0	0.0	0.0	0.0
90–94	0.0	0.0	0.0	0.0
95–100	0.0	0.0	0.0	0.0

Table 7 ($2.50/day 2005 PPP line): Errors (average differences between estimated poverty rates and observed rates) for groups at a point in time by sample size, with confidence intervals, for 1,000 bootstraps of various sample sizes, 2014 scorecard applied to the 2014 validation sample

Taille de l'échantillon	Ecart entre valeur estimée et réelle			
		Intervalle de confiance (±points de pourcentage)		
n	Ecart	90 pour cent	95 pour cent	99 pour cent
1	–0.4	64.7	78.3	94.3
4	–0.6	30.1	36.5	44.8
8	–0.4	21.0	24.8	34.3
16	–0.1	13.7	17.9	21.4
32	–0.4	9.8	11.2	15.0
64	–0.3	6.7	8.2	10.9
128	–0.3	4.9	5.9	7.7
256	–0.4	3.4	4.1	5.1
512	–0.4	2.5	2.9	3.9
1,024	–0.4	1.8	2.1	2.6
2,048	–0.4	1.2	1.4	1.9
4,096	–0.4	0.9	1.0	1.4
8,192	–0.4	0.6	0.7	1.0
16,384	–0.4	0.4	0.5	0.7

Table 11 ($2.50/day 2005 PPP line): Percentages of households by cut-off score and targeting classification, along with the hit rate and BPAC, 2014 scorecard applied to the 2014 validation sample

Point de coupure	Inclusion: <Seuil de pauvreté judicieusement ciblé	Défaut de couverture: <Seuil de pauvreté par erreur non ciblé	Fuite: >=Seuil de pauvreté par erreur ciblé	Exclusion: >=Seuil de pauvreté judicieusement non ciblé	Taux de succès: Inclusion + Exclusion	BPAC Voir texte
<=4	1.6	37.3	0.0	61.1	62.7	–91.5
<=9	3.6	35.3	0.1	61.0	64.7	–81.1
<=14	7.6	31.3	0.2	60.9	68.5	–60.5
<=19	12.4	26.5	0.7	60.4	72.8	–34.1
<=24	19.1	19.8	1.8	59.3	78.4	+3.1
<=29	25.5	13.4	3.3	57.8	83.2	+39.4
<=34	30.1	8.8	6.8	54.3	84.4	+72.0
<=39	33.6	5.3	9.9	51.2	84.8	+74.5
<=44	35.9	3.0	15.0	46.1	82.0	+61.5
<=49	37.2	1.7	20.7	40.4	77.6	+46.7
<=54	38.0	0.9	26.6	34.5	72.5	+31.6
<=59	38.4	0.5	32.7	28.4	66.8	+16.0
<=64	38.6	0.3	39.1	22.0	60.7	–0.4
<=69	38.8	0.1	44.7	16.4	55.2	–14.9
<=74	38.9	0.0	51.1	10.0	48.9	–31.4
<=79	38.9	0.0	55.5	5.6	44.5	–42.8
<=84	38.9	0.0	58.4	2.7	41.6	–50.2
<=89	38.9	0.0	60.4	0.7	39.6	–55.3
<=94	38.9	0.0	61.0	0.1	39.0	–56.9
<=100	38.9	0.0	61.1	0.0	38.9	–57.1

Inclusion, défaut de couverture, fuite, et exclusion normalisés à 100.

Table 12 ($2.50/day 2005 PPP line): Share of all households who are targeted (that is, score at or below a cut-off), the share of targeted households who are poor, the share of poor households who are targeted, and the number of poor households who are successfully targeted (inclusion) per non-poor household mistakenly targeted (leakage), 2014 scorecard applied to the 2014 validation sample

Point de coupure	% ménages ciblés	% ciblés qui sont pauvres	% pauvres qui sont ciblés	Ménages pauvres ciblés par ménage non pauvre ciblé
<=4	1.6	100.0	4.2	Uniquemente pauvres ciblés
<=9	3.7	97.9	9.4	46.9:1
<=14	7.8	97.5	19.5	39.2:1
<=19	13.2	94.4	32.0	16.7:1
<=24	21.0	91.3	49.2	10.4:1
<=29	28.8	88.4	65.4	7.6:1
<=34	36.9	81.6	77.3	4.4:1
<=39	43.5	77.2	86.4	3.4:1
<=44	50.9	70.6	92.3	2.4:1
<=49	57.9	64.2	95.7	1.8:1
<=54	64.6	58.8	97.6	1.4:1
<=59	71.1	54.0	98.7	1.2:1
<=64	77.7	49.7	99.3	1.0:1
<=69	83.5	46.5	99.9	0.9:1
<=74	90.0	43.2	100.0	0.8:1
<=79	94.4	41.2	100.0	0.7:1
<=84	97.3	40.0	100.0	0.7:1
<=89	99.3	39.2	100.0	0.6:1
<=94	99.9	38.9	100.0	0.6:1
<=100	100.0	38.9	100.0	0.6:1

Tables for
the $5.00/day 2005 PPP Poverty Line

Table 4 ($5.00/day 2005 PPP line): Estimated poverty likelihoods associated with scores

Score	Probabilité que le ménage ait de dépenses de consommation en dessous du seuil de pauvreté
0–4	100.0
5–9	100.0
10–14	100.0
15–19	100.0
20–24	99.9
25–29	98.2
30–34	96.4
35–39	88.8
40–44	85.7
45–49	74.8
50–54	65.9
55–59	49.9
60–64	40.7
65–69	34.5
70–74	26.9
75–79	15.5
80–84	2.5
85–89	0.8
90–94	0.0
95–100	0.0

Table 6 ($5.00/day 2005 PPP line): Average errors (differences between estimated and observed poverty likelihoods) for households by score range, with confidence intervals, from 1,000 bootstraps of n = 16,384, 2014 scorecard applied to the 2014 validation sample

	Ecart entre valeur estimée et réelle			
		Intervalle de confiance (±points de pourcentage)		
Score	Ecart	90 pour cent	95 pour cent	99 pour cent
0–4	0.0	0.0	0.0	0.0
5–9	+0.3	0.3	0.4	0.4
10–14	0.0	0.0	0.0	0.0
15–19	+0.3	0.3	0.3	0.4
20–24	+1.1	0.5	0.6	0.8
25–29	–0.2	0.6	0.7	0.9
30–34	–0.6	0.7	0.9	1.1
35–39	–5.5	3.3	3.4	3.5
40–44	+6.1	2.3	2.7	3.8
45–49	+2.1	2.7	3.2	4.1
50–54	+17.6	3.0	3.6	4.6
55–59	–3.0	3.4	4.0	5.2
60–64	+3.6	2.9	3.4	4.4
65–69	–6.9	4.9	5.3	5.7
70–74	+11.6	2.1	2.5	3.2
75–79	+5.5	1.9	2.3	3.1
80–84	+1.3	0.9	1.0	1.3
85–89	–0.3	0.7	0.8	1.1
90–94	0.0	0.0	0.0	0.0
95–100	0.0	0.0	0.0	0.0

Table 7 ($5.00/day 2005 PPP line): Errors (average differences between estimated poverty rates and observed rates) for groups at a point in time by sample size, with confidence intervals, for 1,000 bootstraps of various sample sizes, 2014 scorecard applied to the 2014 validation sample

Taille de l'échantillon	Ecart entre valeur estimée et réelle			
		Intervalle de confiance (±points de pourcentage)		
n	Ecart	90 pour cent	95 pour cent	99 pour cent
1	+1.5	62.6	70.2	91.3
4	+0.8	28.7	36.0	47.5
8	+1.3	22.1	26.4	33.8
16	+1.8	14.9	18.4	25.5
32	+1.9	10.3	12.8	18.1
64	+1.9	7.4	8.9	11.7
128	+2.0	5.5	6.6	8.8
256	+2.0	4.0	4.7	6.2
512	+2.0	2.8	3.2	4.3
1,024	+2.0	1.9	2.4	3.3
2,048	+2.0	1.4	1.6	2.2
4,096	+2.0	1.0	1.2	1.6
8,192	+2.0	0.7	0.8	1.1
16,384	+2.0	0.5	0.6	0.9

Table 11 ($5.00/day 2005 PPP line): Percentages of households by cut-off score and targeting classification, along with the hit rate and BPAC, 2014 scorecard applied to the 2014 validation sample

Point de coupure	Inclusion: <Seuil de pauvreté judicieusement ciblé	Défaut de couverture: <Seuil de pauvreté par erreur non ciblé	Fuite: >=Seuil de pauvreté par erreur ciblé	Exclusion: >=Seuil de pauvreté judicieusement non ciblé	Taux de succès: Inclusion + Exclusion	BPAC Voir texte
<=4	1.6	66.7	0.0	31.7	33.3	–95.2
<=9	3.7	64.6	0.0	31.7	35.4	–89.1
<=14	7.8	60.5	0.0	31.7	39.5	–77.2
<=19	13.1	55.2	0.0	31.7	44.8	–61.4
<=24	20.8	47.5	0.1	31.6	52.4	–38.8
<=29	28.5	39.8	0.3	31.4	60.0	–16.1
<=34	36.2	32.1	0.6	31.1	67.3	+7.0
<=39	42.4	25.9	1.1	30.6	73.0	+25.9
<=44	48.5	19.8	2.4	29.3	77.8	+45.5
<=49	53.8	14.5	4.1	27.6	81.4	+63.6
<=54	57.7	10.6	6.9	24.8	82.4	+79.0
<=59	61.4	6.9	9.7	22.0	83.3	+85.7
<=64	64.3	4.0	13.4	18.3	82.5	+80.3
<=69	66.6	1.7	16.9	14.8	81.4	+75.2
<=74	67.7	0.6	22.3	9.4	77.1	+67.3
<=79	68.2	0.1	26.2	5.5	73.7	+61.6
<=84	68.3	0.0	29.1	2.6	70.9	+57.4
<=89	68.3	0.0	31.0	0.7	69.0	+54.6
<=94	68.3	0.0	31.7	0.1	68.3	+53.7
<=100	68.3	0.0	31.7	0.0	68.3	+53.6

Inclusion, défaut de couverture, fuite, et exclusion normalisés à 100.

Table 12 ($5.00/day 2005 PPP line): Share of all households who are targeted (that is, score at or below a cut-off), the share of targeted households who are poor, the share of poor households who are targeted, and the number of poor households who are successfully targeted (inclusion) per non-poor household mistakenly targeted (leakage), 2014 scorecard applied to the 2014 validation sample

Point de coupure	% ménages ciblés	% ciblés qui sont pauvres	% pauvres qui sont ciblés	Ménages pauvres ciblés par ménage non pauvre ciblé
<=4	1.6	100.0	2.4	Uniquemente pauvres ciblés
<=9	3.7	99.6	5.4	248.6:1
<=14	7.8	99.8	11.4	521.0:1
<=19	13.2	99.7	19.3	339.6:1
<=24	21.0	99.4	30.5	165.5:1
<=29	28.8	99.1	41.8	109.1:1
<=34	36.9	98.3	53.0	58.3:1
<=39	43.5	97.5	62.1	38.8:1
<=44	50.9	95.4	71.0	20.5:1
<=49	57.9	92.9	78.8	13.0:1
<=54	64.6	89.3	84.4	8.3:1
<=59	71.1	86.3	89.8	6.3:1
<=64	77.7	82.7	94.1	4.8:1
<=69	83.5	79.7	97.5	3.9:1
<=74	90.0	75.2	99.1	3.0:1
<=79	94.4	72.2	99.9	2.6:1
<=84	97.3	70.1	99.9	2.3:1
<=89	99.3	68.8	100.0	2.2:1
<=94	99.9	68.3	100.0	2.2:1
<=100	100.0	68.3	100.0	2.2:1

Tables for
the $1.90/day 2011 PPP Poverty Line

Table 4 ($1.90/day 2005 PPP line): Estimated poverty likelihoods associated with scores

Score	Probabilité que le ménage ait de dépenses de consommation en dessous du seuil de pauvreté
0–4	90.1
5–9	78.1
10–14	73.6
15–19	53.8
20–24	37.7
25–29	23.3
30–34	14.6
35–39	6.4
40–44	1.4
45–49	0.7
50–54	0.4
55–59	0.1
60–64	0.0
65–69	0.0
70–74	0.0
75–79	0.0
80–84	0.0
85–89	0.0
90–94	0.0
95–100	0.0

Table 6 ($1.90/day 2005 PPP line): Average errors (differences between estimated and observed poverty likelihoods) for households by score range, with confidence intervals, from 1,000 bootstraps of n = 16,384, 2014 scorecard applied to the 2014 validation sample

	Ecart entre valeur estimée et réelle			
		Intervalle de confiance (±points de pourcentage)		
Score	Ecart	90 pour cent	95 pour cent	99 pour cent
0–4	+3.9	3.3	4.0	5.4
5–9	–5.0	4.2	4.5	5.4
10–14	+5.6	3.3	3.9	4.9
15–19	–9.2	6.1	6.3	6.8
20–24	–12.0	7.3	7.6	8.2
25–29	–1.8	2.3	2.7	3.4
30–34	+0.4	1.8	2.1	2.7
35–39	–1.4	1.4	1.7	2.3
40–44	–1.8	1.3	1.4	1.6
45–49	+0.3	0.3	0.3	0.3
50–54	+0.4	0.0	0.0	0.0
55–59	+0.1	0.0	0.0	0.0
60–64	0.0	0.1	0.1	0.1
65–69	0.0	0.0	0.0	0.0
70–74	0.0	0.0	0.0	0.0
75–79	0.0	0.0	0.0	0.0
80–84	0.0	0.0	0.0	0.0
85–89	0.0	0.0	0.0	0.0
90–94	0.0	0.0	0.0	0.0
95–100	0.0	0.0	0.0	0.0

Table 7 ($1.90/day 2005 PPP line): Errors (average differences between estimated poverty rates and observed rates) for groups at a point in time by sample size, with confidence intervals, for 1,000 bootstraps of various sample sizes, 2014 scorecard applied to the 2014 validation sample

Taille de l'échantillon	Ecart entre valeur estimée et réelle			
		Intervalle de confiance (±points de pourcentage)		
n	Ecart	90 pour cent	95 pour cent	99 pour cent
1	–2.3	50.0	69.6	85.9
4	–1.0	27.9	34.5	46.9
8	–1.1	19.4	24.2	30.3
16	–1.1	14.1	16.6	21.7
32	–1.5	9.9	11.8	15.5
64	–1.7	7.3	8.5	11.6
128	–1.6	5.2	6.0	8.0
256	–1.7	3.7	4.4	6.2
512	–1.6	2.4	3.0	4.1
1,024	–1.6	1.8	2.0	3.0
2,048	–1.7	1.3	1.5	2.0
4,096	–1.7	0.9	1.1	1.4
8,192	–1.7	0.6	0.8	1.0
16,384	–1.7	0.4	0.6	0.7

Table 11 ($1.90/day 2005 PPP line): Percentages of households by cut-off score and targeting classification, along with the hit rate and BPAC, 2014 scorecard applied to the 2014 validation sample

Point de coupure	Inclusion: <Seuil de pauvreté judicieusement ciblé	Défaut de couverture: <Seuil de pauvreté par erreur non ciblé	Fuite: >=Seuil de pauvreté par erreur ciblé	Exclusion: >=Seuil de pauvreté judicieusement non ciblé	Taux de succès: Inclusion + Exclusion	BPAC Voir texte
<=4	1.4	14.2	0.3	84.2	85.6	–80.5
<=9	3.1	12.5	0.7	83.8	86.8	–56.4
<=14	5.6	10.0	2.2	82.3	87.9	–13.9
<=19	8.6	6.9	4.5	79.9	88.6	+40.4
<=24	12.0	3.6	9.0	75.4	87.4	+42.1
<=29	13.7	1.8	15.1	69.4	83.1	+3.0
<=34	14.7	0.8	22.1	62.3	77.1	–42.1
<=39	15.3	0.3	28.2	56.2	71.5	–81.7
<=44	15.5	0.1	35.4	49.1	64.6	–127.4
<=49	15.5	0.0	42.4	42.1	57.6	–172.6
<=54	15.5	0.0	49.0	35.4	51.0	–215.3
<=59	15.5	0.0	55.6	28.9	44.4	–257.3
<=64	15.6	0.0	62.1	22.3	37.9	–299.7
<=69	15.6	0.0	68.0	16.5	32.0	–337.2
<=74	15.6	0.0	74.4	10.0	25.6	–378.8
<=79	15.6	0.0	78.9	5.6	21.1	–407.4
<=84	15.6	0.0	81.8	2.7	18.2	–425.9
<=89	15.6	0.0	83.8	0.7	16.2	–438.7
<=94	15.6	0.0	84.4	0.1	15.6	–442.7
<=100	15.6	0.0	84.4	0.0	15.6	–443.1

Inclusion, défaut de couverture, fuite, et exclusion normalisés à 100.

Table 12 ($1.90/day 2005 PPP line): Share of all households who are targeted (that is, score at or below a cut-off), the share of targeted households who are poor, the share of poor households who are targeted, and the number of poor households who are successfully targeted (inclusion) per non-poor household mistakenly targeted (leakage), 2014 scorecard applied to the 2014 validation sample

Point de coupure	% ménages ciblés	% ciblés qui sont pauvres	% pauvres qui sont ciblés	Ménages pauvres ciblés par ménage non pauvre ciblé
<=4	1.6	84.6	9.0	5.5:1
<=9	3.7	81.9	19.6	4.5:1
<=14	7.8	71.9	36.0	2.6:1
<=19	13.2	65.6	55.6	1.9:1
<=24	21.0	57.0	76.9	1.3:1
<=29	28.8	47.6	88.1	0.9:1
<=34	36.9	40.0	94.8	0.7:1
<=39	43.5	35.1	98.3	0.5:1
<=44	50.9	30.5	99.7	0.4:1
<=49	57.9	26.8	99.9	0.4:1
<=54	64.6	24.1	99.9	0.3:1
<=59	71.1	21.9	99.9	0.3:1
<=64	77.7	20.0	100.0	0.3:1
<=69	83.5	18.6	100.0	0.2:1
<=74	90.0	17.3	100.0	0.2:1
<=79	94.4	16.5	100.0	0.2:1
<=84	97.3	16.0	100.0	0.2:1
<=89	99.3	15.7	100.0	0.2:1
<=94	99.9	15.6	100.0	0.2:1
<=100	100.0	15.6	100.0	0.2:1

Tables for
the $3.10/day 2011 PPP Poverty Line

Table 4 ($3.10/day 2005 PPP line): Estimated poverty likelihoods associated with scores

Score	Probabilité que le ménage ait de dépenses de consommation en dessous du seuil de pauvreté
0–4	97.0
5–9	94.6
10–14	91.2
15–19	85.2
20–24	77.6
25–29	60.0
30–34	44.5
35–39	27.8
40–44	18.5
45–49	7.9
50–54	5.3
55–59	2.0
60–64	1.0
65–69	1.0
70–74	0.5
75–79	0.0
80–84	0.0
85–89	0.0
90–94	0.0
95–100	0.0

Table 6 ($3.10/day 2005 PPP line): Average errors (differences between estimated and observed poverty likelihoods) for households by score range, with confidence intervals, from 1,000 bootstraps of n = 16,384, 2014 scorecard applied to the 2014 validation sample

	Ecart entre valeur estimée et réelle			
		Intervalle de confiance (±points de pourcentage)		
Score	Ecart	90 pour cent	95 pour cent	99 pour cent
0–4	–3.0	1.5	1.5	1.5
5–9	–2.2	1.8	1.9	2.6
10–14	–1.3	1.6	2.0	2.5
15–19	–0.7	2.1	2.5	3.4
20–24	+0.3	2.3	2.6	3.4
25–29	–3.9	3.3	3.5	4.1
30–34	–3.0	2.8	3.1	4.3
35–39	–9.3	6.0	6.3	6.8
40–44	+1.5	2.1	2.3	3.3
45–49	–2.0	1.8	2.0	2.4
50–54	–0.8	1.2	1.5	1.9
55–59	–0.8	0.9	1.1	1.3
60–64	+0.2	0.4	0.5	0.6
65–69	+0.8	0.2	0.2	0.2
70–74	+0.5	0.0	0.0	0.0
75–79	0.0	0.0	0.0	0.0
80–84	0.0	0.0	0.0	0.0
85–89	0.0	0.0	0.0	0.0
90–94	0.0	0.0	0.0	0.0
95–100	0.0	0.0	0.0	0.0

Table 7 ($3.10/day 2005 PPP line): Errors (average differences between estimated poverty rates and observed rates) for groups at a point in time by sample size, with confidence intervals, for 1,000 bootstraps of various sample sizes, 2014 scorecard applied to the 2014 validation sample

Taille de l'échantillon	Ecart entre valeur estimée et réelle			
		Intervalle de confiance (±points de pourcentage)		
n	Ecart	90 pour cent	95 pour cent	99 pour cent
1	–1.4	66.1	79.5	89.9
4	–2.0	31.0	36.5	49.8
8	–1.6	21.4	25.1	35.3
16	–1.0	14.1	17.4	22.2
32	–1.4	10.0	12.2	16.4
64	–1.2	7.2	8.4	11.8
128	–1.2	5.1	6.6	8.0
256	–1.2	3.7	4.3	6.0
512	–1.2	2.5	3.1	3.8
1,024	–1.2	1.8	2.1	3.0
2,048	–1.3	1.2	1.4	2.0
4,096	–1.3	0.9	1.1	1.5
8,192	–1.3	0.6	0.7	1.0
16,384	–1.3	0.5	0.5	0.7

Table 11 ($3.10/day 2005 PPP line): Percentages of households by cut-off score and targeting classification, along with the hit rate and BPAC, 2014 scorecard applied to the 2014 validation sample

Point de coupure	Inclusion: <Seuil de pauvreté judicieusement ciblé	Défaut de couverture: <Seuil de pauvreté par erreur non ciblé	Fuite: >=Seuil de pauvreté par erreur ciblé	Exclusion: >=Seuil de pauvreté judicieusement non ciblé	Taux de succès: Inclusion + Exclusion	BPAC Voir texte
<=4	1.6	29.8	0.0	68.6	70.2	–89.5
<=9	3.6	27.8	0.1	68.5	72.2	–76.5
<=14	7.3	24.1	0.5	68.1	75.4	–51.9
<=19	11.9	19.5	1.3	67.3	79.2	–20.1
<=24	17.7	13.7	3.3	65.3	83.1	+23.2
<=29	22.6	8.8	6.2	62.4	84.9	+63.5
<=34	26.2	5.2	10.7	57.9	84.1	+66.0
<=39	28.6	2.8	15.0	53.6	82.2	+52.3
<=44	29.9	1.5	20.9	47.7	77.6	+33.4
<=49	30.7	0.7	27.3	41.3	72.0	+13.1
<=54	31.1	0.3	33.5	35.1	66.2	–6.6
<=59	31.3	0.1	39.8	28.8	60.1	–26.7
<=64	31.4	0.0	46.3	22.3	53.7	–47.5
<=69	31.4	0.0	52.1	16.5	47.9	–66.1
<=74	31.4	0.0	58.6	10.0	41.4	–86.6
<=79	31.4	0.0	63.0	5.6	37.0	–100.8
<=84	31.4	0.0	65.9	2.7	34.1	–110.0
<=89	31.4	0.0	67.9	0.7	32.1	–116.3
<=94	31.4	0.0	68.6	0.1	31.4	–118.3
<=100	31.4	0.0	68.6	0.0	31.4	–118.5

Inclusion, défaut de couverture, fuite, et exclusion normalisés à 100.

Table 12 ($3.10/day 2005 PPP line): Share of all households who are targeted (that is, score at or below a cut-off), the share of targeted households who are poor, the share of poor households who are targeted, and the number of poor households who are successfully targeted (inclusion) per non-poor household mistakenly targeted (leakage), 2014 scorecard applied to the 2014 validation sample

Point de coupure	% ménages ciblés	% ciblés qui sont pauvres	% pauvres qui sont ciblés	Ménages pauvres ciblés par ménage non pauvre ciblé
<=4	1.6	100.0	5.2	Uniquemente pauvres ciblés
<=9	3.7	97.9	11.6	46.9:1
<=14	7.8	94.0	23.3	15.6:1
<=19	13.2	90.1	37.9	9.1:1
<=24	21.0	84.5	56.4	5.4:1
<=29	28.8	78.3	71.8	3.6:1
<=34	36.9	71.1	83.4	2.5:1
<=39	43.5	65.6	91.0	1.9:1
<=44	50.9	58.9	95.3	1.4:1
<=49	57.9	52.9	97.6	1.1:1
<=54	64.6	48.2	99.1	0.9:1
<=59	71.1	44.0	99.7	0.8:1
<=64	77.7	40.4	99.9	0.7:1
<=69	83.5	37.6	100.0	0.6:1
<=74	90.0	34.9	100.0	0.5:1
<=79	94.4	33.2	100.0	0.5:1
<=84	97.3	32.3	100.0	0.5:1
<=89	99.3	31.6	100.0	0.5:1
<=94	99.9	31.4	100.0	0.5:1
<=100	100.0	31.4	100.0	0.5:1

Tables for
the Poverty Line Marking the Poorest Half of People
below 100% of the National Poverty Line

Table 4 (Line marking poorest half of people below 100% of the national line): Estimated poverty likelihoods associated with scores

Score	Probabilité que le ménage ait de dépenses de consommation en dessous du seuil de pauvreté
0–4	81.0
5–9	70.5
10–14	60.9
15–19	41.7
20–24	27.2
25–29	15.3
30–34	7.5
35–39	4.0
40–44	0.7
45–49	0.6
50–54	0.3
55–59	0.1
60–64	0.0
65–69	0.0
70–74	0.0
75–79	0.0
80–84	0.0
85–89	0.0
90–94	0.0
95–100	0.0

Table 6 (Line marking poorest half of people below 100% of the national line): Average errors (differences between estimated and observed poverty likelihoods) for households by score range, with confidence intervals, from 1,000 bootstraps of $n = 16{,}384$, 2014 scorecard applied to the 2014 validation sample

	Ecart entre valeur estimée et réelle			
		Intervalle de confiance (±points de pourcentage)		
Score	Ecart	90 pour cent	95 pour cent	99 pour cent
0–4	–2.2	3.7	4.5	5.8
5–9	–3.8	4.0	4.8	6.1
10–14	+3.3	3.5	4.0	5.5
15–19	–2.5	3.0	3.6	4.8
20–24	–12.9	7.8	8.2	8.7
25–29	+1.6	1.8	2.2	2.7
30–34	–2.2	1.8	1.9	2.2
35–39	+0.3	1.0	1.3	1.6
40–44	–1.1	0.9	1.0	1.2
45–49	+0.3	0.2	0.3	0.3
50–54	+0.3	0.0	0.0	0.0
55–59	+0.1	0.0	0.0	0.0
60–64	0.0	0.0	0.0	0.0
65–69	0.0	0.0	0.0	0.0
70–74	0.0	0.0	0.0	0.0
75–79	0.0	0.0	0.0	0.0
80–84	0.0	0.0	0.0	0.0
85–89	0.0	0.0	0.0	0.0
90–94	0.0	0.0	0.0	0.0
95–100	0.0	0.0	0.0	0.0

Table 7 (Line marking poorest half of people below 100% of the national line): Errors (average differences between estimated poverty rates and observed rates) for groups at a point in time by sample size, with confidence intervals, for 1,000 bootstraps of various sample sizes, 2014 scorecard applied to the 2014 validation sample

Taille de l'échantillon	Ecart entre valeur estimée et réelle			
		Intervalle de confiance (±points de pourcentage)		
n	Ecart	90 pour cent	95 pour cent	99 pour cent
1	–1.9	57.3	63.2	83.3
4	–0.7	25.9	33.2	45.2
8	–0.6	18.5	22.6	30.9
16	–0.7	12.4	15.7	20.6
32	–0.9	9.5	11.6	14.9
64	–1.2	7.0	8.2	10.1
128	–1.2	4.9	5.7	7.6
256	–1.3	3.6	4.3	5.8
512	–1.3	2.4	2.9	4.1
1,024	–1.3	1.7	2.1	2.7
2,048	–1.3	1.3	1.5	2.0
4,096	–1.3	0.9	1.0	1.5
8,192	–1.3	0.6	0.8	1.0
16,384	–1.3	0.4	0.5	0.6

Table 11 (Line marking poorest half of people below 100% of the national line): Percentages of households by cut-off score and targeting classification, along with the hit rate and BPAC, 2014 scorecard applied to the 2014 validation sample

Point de coupure	Inclusion: <Seuil de pauvreté judicieusement ciblé	Défaut de couverture: <Seuil de pauvreté par erreur non ciblé	Fuite: >=Seuil de pauvreté par erreur ciblé	Exclusion: >=Seuil de pauvreté judicieusement non ciblé	Taux de succès: Inclusion + Exclusion	BPAC Voir texte
<=4	1.3	10.5	0.3	87.8	89.1	–74.9
<=9	2.8	9.1	1.0	87.2	89.9	–45.2
<=14	4.9	7.0	2.9	85.2	90.1	+6.5
<=19	7.1	4.7	6.0	82.1	89.3	+49.2
<=24	9.6	2.2	11.3	76.8	86.4	+4.4
<=29	10.7	1.2	18.1	70.0	80.7	–52.8
<=34	11.4	0.4	25.4	62.7	74.2	–114.4
<=39	11.7	0.2	31.8	56.3	68.0	–168.7
<=44	11.8	0.0	39.0	49.1	60.9	–229.5
<=49	11.8	0.0	46.1	42.1	53.9	–289.1
<=54	11.8	0.0	52.7	35.4	47.3	–345.2
<=59	11.8	0.0	59.2	28.9	40.7	–400.3
<=64	11.8	0.0	65.8	22.3	34.1	–456.0
<=69	11.8	0.0	71.7	16.5	28.3	–505.4
<=74	11.8	0.0	78.1	10.0	21.8	–559.9
<=79	11.8	0.0	82.6	5.6	17.4	–597.5
<=84	11.8	0.0	85.5	2.7	14.5	–621.8
<=89	11.8	0.0	87.5	0.7	12.5	–638.6
<=94	11.8	0.0	88.1	0.1	11.9	–643.9
<=100	11.8	0.0	88.1	0.0	11.8	–644.4

Inclusion, défaut de couverture, fuite, et exclusion normalisés à 100.

Table 12 (Line marking poorest half of people below 100% of the national line): Share of all households who are targeted (that is, score at or below a cut-off), the share of targeted households who are poor, the share of poor households who are targeted, and the number of poor households who are successfully targeted (inclusion) per non-poor household mistakenly targeted (leakage), 2014 scorecard applied to the 2014 validation sample

Point de coupure	% ménages ciblés	% ciblés qui sont pauvres	% pauvres qui sont ciblés	Ménages pauvres ciblés par ménage non pauvre ciblé
<=4	1.6	80.7	11.2	4.2:1
<=9	3.7	74.3	23.4	2.9:1
<=14	7.8	62.3	41.0	1.7:1
<=19	13.2	54.2	60.3	1.2:1
<=24	21.0	45.9	81.2	0.8:1
<=29	28.8	37.1	90.1	0.6:1
<=34	36.9	31.0	96.6	0.4:1
<=39	43.5	26.8	98.7	0.4:1
<=44	50.9	23.2	99.8	0.3:1
<=49	57.9	20.4	100.0	0.3:1
<=54	64.6	18.3	100.0	0.2:1
<=59	71.1	16.7	100.0	0.2:1
<=64	77.7	15.2	100.0	0.2:1
<=69	83.5	14.2	100.0	0.2:1
<=74	90.0	13.2	100.0	0.2:1
<=79	94.4	12.5	100.0	0.1:1
<=84	97.3	12.2	100.0	0.1:1
<=89	99.3	11.9	100.0	0.1:1
<=94	99.9	11.8	100.0	0.1:1
<=100	100.0	11.8	100.0	0.1:1

Tables for
the First-Quintile (20^{th}-Percentile) Poverty Line

Table 4 (First-quintile (20th-percentile) line): Estimated poverty likelihoods associated with scores

Score	Probabilité que le ménage ait de dépenses de consommation en dessous du seuil de pauvreté
0–4	82.6
5–9	73.1
10–14	62.8
15–19	45.4
20–24	29.3
25–29	16.9
30–34	9.5
35–39	4.0
40–44	0.7
45–49	0.6
50–54	0.3
55–59	0.1
60–64	0.0
65–69	0.0
70–74	0.0
75–79	0.0
80–84	0.0
85–89	0.0
90–94	0.0
95–100	0.0

Table 6 (First-quintile (20th-percentile) line): Average errors (differences between estimated and observed poverty likelihoods) for households by score range, with confidence intervals, from 1,000 bootstraps of n = 16,384, 2014 scorecard applied to the 2014 validation sample

	Ecart entre valeur estimée et réelle			
		Intervalle de confiance (±points de pourcentage)		
Score	Ecart	90 pour cent	95 pour cent	99 pour cent
0–4	–1.9	3.6	4.2	5.7
5–9	–4.9	4.4	4.7	5.9
10–14	+2.7	3.5	4.1	5.1
15–19	–6.4	4.8	5.0	5.6
20–24	–11.8	7.3	7.6	8.2
25–29	+0.7	1.9	2.3	3.1
30–34	–0.7	1.5	1.7	2.2
35–39	–1.3	1.3	1.4	1.8
40–44	–1.1	0.9	1.0	1.2
45–49	+0.3	0.2	0.3	0.3
50–54	+0.3	0.0	0.0	0.0
55–59	+0.1	0.0	0.0	0.0
60–64	0.0	0.0	0.0	0.0
65–69	0.0	0.0	0.0	0.0
70–74	0.0	0.0	0.0	0.0
75–79	0.0	0.0	0.0	0.0
80–84	0.0	0.0	0.0	0.0
85–89	0.0	0.0	0.0	0.0
90–94	0.0	0.0	0.0	0.0
95–100	0.0	0.0	0.0	0.0

Table 7 (First-quintile (20th-percentile) line): Errors (average differences between estimated poverty rates and observed rates) for groups at a point in time by sample size, with confidence intervals, for 1,000 bootstraps of various sample sizes, 2014 scorecard applied to the 2014 validation sample

Taille de l'échantillon	Ecart entre valeur estimée et réelle			
		Intervalle de confiance (±points de pourcentage)		
n	Ecart	90 pour cent	95 pour cent	99 pour cent
1	–2.1	50.0	64.3	84.5
4	–1.0	25.8	32.4	45.2
8	–0.9	18.2	22.4	29.8
16	–0.9	12.5	15.3	20.0
32	–1.2	9.8	11.5	15.1
64	–1.4	7.0	8.3	10.6
128	–1.4	4.8	5.8	7.3
256	–1.5	3.5	4.4	5.4
512	–1.5	2.4	2.9	4.0
1,024	–1.5	1.7	2.0	2.6
2,048	–1.5	1.3	1.5	1.9
4,096	–1.5	0.8	1.0	1.4
8,192	–1.6	0.6	0.7	1.0
16,384	–1.5	0.4	0.5	0.7

Table 11 (First-quintile (20th-percentile) line): Percentages of households by cut-off score and targeting classification, along with the hit rate and BPAC, 2014 scorecard applied to the 2014 validation sample

Point de coupure	Inclusion: <Seuil de pauvreté judicieusement ciblé	Défaut de couverture: <Seuil de pauvreté par erreur non ciblé	Fuite: >=Seuil de pauvreté par erreur ciblé	Exclusion: >=Seuil de pauvreté judicieusement non ciblé	Taux de succès: Inclusion + Exclusion	BPAC Voir texte
<=4	1.4	11.4	0.3	86.9	88.3	–76.4
<=9	2.9	9.9	0.8	86.4	89.3	–48.2
<=14	5.1	7.7	2.7	84.5	89.6	+0.9
<=19	7.6	5.1	5.5	81.7	89.3	+56.6
<=24	10.2	2.6	10.7	76.5	86.7	+16.0
<=29	11.4	1.4	17.4	69.8	81.2	–36.0
<=34	12.2	0.5	24.6	62.6	74.8	–92.7
<=39	12.6	0.2	30.9	56.3	68.9	–142.1
<=44	12.7	0.0	38.1	49.1	61.9	–198.5
<=49	12.8	0.0	45.1	42.1	54.8	–253.8
<=54	12.8	0.0	51.8	35.4	48.2	–305.8
<=59	12.8	0.0	58.3	28.9	41.7	–357.0
<=64	12.8	0.0	64.9	22.3	35.1	–408.7
<=69	12.8	0.0	70.7	16.5	29.2	–454.5
<=74	12.8	0.0	77.2	10.0	22.8	–505.1
<=79	12.8	0.0	81.6	5.6	18.3	–540.0
<=84	12.8	0.0	84.5	2.7	15.4	–562.5
<=89	12.8	0.0	86.5	0.7	13.4	–578.2
<=94	12.8	0.0	87.2	0.1	12.8	–583.1
<=100	12.8	0.0	87.2	0.0	12.8	–583.5

Inclusion, défaut de couverture, fuite, et exclusion normalisés à 100.

Table 12 (First-quintile (20th-percentile) line): Share of all households who are targeted (that is, score at or below a cut-off), the share of targeted households who are poor, the share of poor households who are targeted, and the number of poor households who are successfully targeted (inclusion) per non-poor household mistakenly targeted (leakage), 2014 scorecard applied to the 2014 validation sample

Point de coupure	% ménages ciblés	% ciblés qui sont pauvres	% pauvres qui sont ciblés	Ménages pauvres ciblés par ménage non pauvre ciblé
<=4	1.6	82.9	10.7	4.8:1
<=9	3.7	77.6	22.6	3.5:1
<=14	7.8	65.4	39.9	1.9:1
<=19	13.2	57.8	59.7	1.4:1
<=24	21.0	48.7	80.0	0.9:1
<=29	28.8	39.6	89.3	0.7:1
<=34	36.9	33.2	95.8	0.5:1
<=39	43.5	29.0	98.8	0.4:1
<=44	50.9	25.0	99.8	0.3:1
<=49	57.9	22.0	100.0	0.3:1
<=54	64.6	19.8	100.0	0.2:1
<=59	71.1	17.9	100.0	0.2:1
<=64	77.7	16.4	100.0	0.2:1
<=69	83.5	15.3	100.0	0.2:1
<=74	90.0	14.2	100.0	0.2:1
<=79	94.4	13.5	100.0	0.2:1
<=84	97.3	13.1	100.0	0.2:1
<=89	99.3	12.8	100.0	0.1:1
<=94	99.9	12.8	100.0	0.1:1
<=100	100.0	12.8	100.0	0.1:1

Tables for
the Second-Quintile (40th-Percentile) Poverty Line

Table 4 (Second-quintile (40^{th}-percentile) line): Estimated poverty likelihoods associated with scores

Score	Probabilité que le ménage ait de dépenses de consommation en dessous du seuil de pauvreté
0–4	97.0
5–9	94.6
10–14	89.4
15–19	80.4
20–24	73.4
25–29	54.7
30–34	38.6
35–39	23.0
40–44	14.0
45–49	6.1
50–54	3.3
55–59	0.8
60–64	0.4
65–69	0.4
70–74	0.0
75–79	0.0
80–84	0.0
85–89	0.0
90–94	0.0
95–100	0.0

Table 6 (Second-quintile (40^{th}-percentile) line): Average errors (differences between estimated and observed poverty likelihoods) for households by score range, with confidence intervals, from 1,000 bootstraps of n = 16,384, 2014 scorecard applied to the 2014 validation sample

	Ecart entre valeur estimée et réelle			
		Intervalle de confiance (±points de pourcentage)		
Score	Ecart	90 pour cent	95 pour cent	99 pour cent
0–4	–3.0	1.5	1.5	1.5
5–9	–1.8	1.6	1.9	2.7
10–14	–2.5	2.0	2.2	2.6
15–19	–3.7	2.9	3.2	3.5
20–24	+0.8	2.4	2.9	3.6
25–29	–3.1	2.8	3.1	3.9
30–34	+0.8	2.6	3.0	3.8
35–39	–11.3	7.0	7.4	7.8
40–44	+3.3	1.7	1.9	3.0
45–49	+0.3	1.1	1.3	1.7
50–54	+1.3	0.6	0.7	1.0
55–59	–1.4	1.1	1.2	1.3
60–64	+0.2	0.2	0.2	0.3
65–69	+0.4	0.0	0.0	0.0
70–74	0.0	0.0	0.0	0.0
75–79	0.0	0.0	0.0	0.0
80–84	0.0	0.0	0.0	0.0
85–89	0.0	0.0	0.0	0.0
90–94	0.0	0.0	0.0	0.0
95–100	0.0	0.0	0.0	0.0

Table 7 (Second-quintile (40th-percentile) line): Errors (average differences between estimated poverty rates and observed rates) for groups at a point in time by sample size, with confidence intervals, for 1,000 bootstraps of various sample sizes, 2014 scorecard applied to the 2014 validation sample

Taille de l'échantillon	Ecart entre valeur estimée et réelle			
		Intervalle de confiance (±points de pourcentage)		
n	Ecart	90 pour cent	95 pour cent	99 pour cent
1	–1.9	58.0	75.2	87.2
4	–1.4	29.3	36.4	52.0
8	–1.0	21.1	24.8	33.5
16	–0.5	14.9	17.4	21.5
32	–0.8	9.9	12.1	16.3
64	–0.9	7.3	8.7	11.5
128	–0.9	5.0	6.1	8.1
256	–0.9	3.5	4.1	6.4
512	–0.8	2.4	3.0	4.0
1,024	–0.8	1.8	2.1	2.8
2,048	–0.9	1.2	1.5	1.9
4,096	–0.9	0.9	1.1	1.4
8,192	–0.9	0.6	0.8	1.0
16,384	–0.9	0.4	0.5	0.7

Table 11 (Second-quintile (40th-percentile) line): Percentages of households by cut-off score and targeting classification, along with the hit rate and BPAC, 2014 scorecard applied to the 2014 validation sample

Targeting cut-off	Inclusion: Below poverty line correctly targeted	Undercoverage: Below poverty line mistakenly not targeted	Leakage: Above poverty line mistakenly targeted	Exclusion: Above poverty line correctly not targeted	Hit rate Inclusion + Exclusion	BPAC See text
<=4	1.6	26.6	0.0	71.7	73.4	–88.4
<=9	3.6	24.6	0.1	71.7	75.3	–74.0
<=14	7.3	21.0	0.5	71.2	78.5	–46.8
<=19	11.7	16.6	1.5	70.3	82.0	–11.9
<=24	17.1	11.2	3.9	67.9	84.9	+34.6
<=29	21.4	6.8	7.4	64.4	85.8	+73.9
<=34	24.4	3.9	12.5	59.3	83.7	+55.9
<=39	26.5	1.7	17.0	54.7	81.2	+39.8
<=44	27.4	0.9	23.5	48.2	75.6	+16.8
<=49	27.9	0.4	30.1	41.7	69.5	–6.4
<=54	28.1	0.2	36.5	35.2	63.3	–29.3
<=59	28.2	0.0	42.9	28.9	57.1	–51.8
<=64	28.3	0.0	49.4	22.3	50.6	–75.0
<=69	28.3	0.0	55.3	16.5	44.7	–95.7
<=74	28.3	0.0	61.7	10.0	38.3	–118.5
<=79	28.3	0.0	66.2	5.6	33.8	–134.3
<=84	28.3	0.0	69.1	2.7	30.9	–144.5
<=89	28.3	0.0	71.1	0.7	28.9	–151.5
<=94	28.3	0.0	71.7	0.1	28.3	–153.8
<=100	28.3	0.0	71.7	0.0	28.3	–153.9

Inclusion, undercoverage, leakage, and exclusion normalized to sum to 100.

Table 12 (Second-quintile (40th-percentile) line): Share of all households who are targeted (that is, score at or below a cut-off), the share of targeted households who are poor, the share of poor households who are targeted, and the number of poor households who are successfully targeted (inclusion) per non-poor household mistakenly targeted (leakage), 2014 scorecard applied to the 2014 validation sample

Point de coupure	% ménages ciblés	% ciblés qui sont pauvres	% pauvres qui sont ciblés	Ménages pauvres ciblés par ménage non pauvre ciblé
<=4	1.6	100.0	5.8	Uniquemente pauvres ciblés
<=9	3.7	97.5	12.8	38.9:1
<=14	7.8	93.1	25.7	13.6:1
<=19	13.2	88.7	41.4	7.9:1
<=24	21.0	81.4	60.4	4.4:1
<=29	28.8	74.4	75.8	2.9:1
<=34	36.9	66.2	86.4	2.0:1
<=39	43.5	60.9	93.8	1.6:1
<=44	50.9	53.8	96.8	1.2:1
<=49	57.9	48.1	98.6	0.9:1
<=54	64.6	43.4	99.3	0.8:1
<=59	71.1	39.7	99.8	0.7:1
<=64	77.7	36.4	100.0	0.6:1
<=69	83.5	33.8	100.0	0.5:1
<=74	90.0	31.4	100.0	0.5:1
<=79	94.4	29.9	100.0	0.4:1
<=84	97.3	29.0	100.0	0.4:1
<=89	99.3	28.4	100.0	0.4:1
<=94	99.9	28.3	100.0	0.4:1
<=100	100.0	28.3	100.0	0.4:1

Tables for the Median (50^{th}-Percentile) Poverty Line

Table 4 (Median (50^{th}-percentile) line): Estimated poverty likelihoods associated with scores

Score	Probabilité que le ménage ait de dépenses de consommation en dessous du seuil de pauvreté
0–4	99.1
5–9	96.8
10–14	95.0
15–19	90.3
20–24	84.4
25–29	69.1
30–34	57.8
35–39	38.2
40–44	26.7
45–49	14.6
50–54	9.4
55–59	5.2
60–64	2.2
65–69	2.2
70–74	1.3
75–79	0.0
80–84	0.0
85–89	0.0
90–94	0.0
95–100	0.0

Table 6 (Median (50th-percentile) line): Average errors (differences between estimated and observed poverty likelihoods) for households by score range, with confidence intervals, from 1,000 bootstraps of n = 16,384, 2014 scorecard applied to the 2014 validation sample

	Ecart entre valeur estimée et réelle			
		Intervalle de confiance (±points de pourcentage)		
Score	Ecart	90 pour cent	95 pour cent	99 pour cent
0–4	–0.9	0.5	0.5	0.5
5–9	+0.1	1.5	1.9	2.6
10–14	–3.1	1.9	2.0	2.2
15–19	+2.1	2.0	2.3	3.1
20–24	–3.0	2.3	2.5	2.7
25–29	–13.5	7.6	7.8	8.1
30–34	+3.0	2.5	3.1	3.8
35–39	–13.2	8.0	8.3	8.9
40–44	+1.7	2.3	2.8	3.8
45–49	+1.7	1.7	2.1	2.6
50–54	+2.2	1.3	1.6	2.0
55–59	–0.3	1.2	1.4	1.8
60–64	+1.3	0.4	0.5	0.6
65–69	–0.6	0.8	1.0	1.3
70–74	+0.9	0.3	0.3	0.4
75–79	0.0	0.0	0.0	0.0
80–84	0.0	0.0	0.0	0.0
85–89	0.0	0.0	0.0	0.0
90–94	0.0	0.0	0.0	0.0
95–100	0.0	0.0	0.0	0.0

Table 7 (Median (50th-percentile) line): Errors (average differences between estimated poverty rates and observed rates) for groups at a point in time by sample size, with confidence intervals, for 1,000 bootstraps of various sample sizes, 2014 scorecard applied to the 2014 validation sample

Taille de l'échantillon	Ecart entre valeur estimée et réelle			
		Intervalle de confiance (±points de pourcentage)		
n	Ecart	90 pour cent	95 pour cent	99 pour cent
1	–1.1	59.8	71.2	93.3
4	–1.7	30.6	36.0	43.7
8	–1.4	20.1	24.3	33.9
16	–1.1	13.9	16.6	22.4
32	–1.4	9.5	11.3	14.6
64	–1.3	6.7	8.1	10.9
128	–1.4	4.9	5.8	7.8
256	–1.4	3.5	4.0	5.3
512	–1.4	2.4	2.9	3.6
1,024	–1.4	1.7	2.1	2.6
2,048	–1.4	1.2	1.4	1.9
4,096	–1.4	0.9	1.0	1.5
8,192	–1.4	0.6	0.7	1.0
16,384	–1.4	0.4	0.5	0.7

Table 11 (Median (50th-percentile) line): Percentages of households by cut-off score and targeting classification, along with the hit rate and BPAC, 2014 scorecard applied to the 2014 validation sample

Point de coupure	Inclusion: <Seuil de pauvreté judicieusement ciblé	Défaut de couverture: <Seuil de pauvreté par erreur non ciblé	Fuite: >=Seuil de pauvreté par erreur ciblé	Exclusion: >=Seuil de pauvreté judicieusement non ciblé	Taux de succès: Inclusion + Exclusion	BPAC Voir texte
<=4	1.6	35.3	0.0	63.1	64.7	–91.1
<=9	3.6	33.3	0.1	63.0	66.6	–80.1
<=14	7.6	29.4	0.2	62.9	70.5	–58.4
<=19	12.3	24.6	0.9	62.2	74.5	–31.0
<=24	18.9	18.1	2.1	61.0	79.9	+7.9
<=29	25.0	12.0	3.8	59.3	84.2	+45.6
<=34	29.3	7.7	7.6	55.5	84.7	+78.9
<=39	32.5	4.4	11.0	52.1	84.6	+70.3
<=44	34.6	2.4	16.3	46.8	81.3	+55.9
<=49	35.6	1.4	22.3	40.7	76.3	+39.5
<=54	36.2	0.8	28.4	34.7	70.9	+23.2
<=59	36.6	0.3	34.5	28.6	65.2	+6.6
<=64	36.7	0.2	41.0	22.1	58.8	–10.9
<=69	36.9	0.0	46.6	16.4	53.3	–26.2
<=74	36.9	0.0	53.1	10.0	46.9	–43.6
<=79	36.9	0.0	57.5	5.6	42.5	–55.6
<=84	36.9	0.0	60.4	2.7	39.6	–63.4
<=89	36.9	0.0	62.4	0.7	37.6	–68.8
<=94	36.9	0.0	63.0	0.1	37.0	–70.5
<=100	36.9	0.0	63.1	0.0	36.9	–70.7

Inclusion, défaut de couverture, fuite, et exclusion normalisés à 100.

Table 12 (Median (50th-percentile) line): Share of all households who are targeted (that is, score at or below a cut-off), the share of targeted households who are poor, the share of poor households who are targeted, and the number of poor households who are successfully targeted (inclusion) per non-poor household mistakenly targeted (leakage), 2014 scorecard applied to the 2014 validation sample

Point de coupure	% ménages ciblés	% ciblés qui sont pauvres	% pauvres qui sont ciblés	Ménages pauvres ciblés par ménage non pauvre ciblé
<=4	1.6	100.0	4.5	Uniquemente pauvres ciblés
<=9	3.7	97.9	9.9	46.9:1
<=14	7.8	97.5	20.5	39.2:1
<=19	13.2	93.4	33.3	14.1:1
<=24	21.0	90.1	51.1	9.1:1
<=29	28.8	86.8	67.6	6.6:1
<=34	36.9	79.4	79.2	3.9:1
<=39	43.5	74.8	88.1	3.0:1
<=44	50.9	67.9	93.5	2.1:1
<=49	57.9	61.4	96.3	1.6:1
<=54	64.6	56.0	97.9	1.3:1
<=59	71.1	51.5	99.1	1.1:1
<=64	77.7	47.3	99.4	0.9:1
<=69	83.5	44.2	99.9	0.8:1
<=74	90.0	41.1	100.0	0.7:1
<=79	94.4	39.1	100.0	0.6:1
<=84	97.3	38.0	100.0	0.6:1
<=89	99.3	37.2	100.0	0.6:1
<=94	99.9	37.0	100.0	0.6:1
<=100	100.0	36.9	100.0	0.6:1

Tables for
the Third-Quintile (60th-Percentile) Poverty Line

Table 4 (Third-quintile (60^{th}-percentile) line): Estimated poverty likelihoods associated with scores

Score	Probabilité que le ménage ait de dépenses de consommation en dessous du seuil de pauvreté
0–4	99.7
5–9	99.4
10–14	98.2
15–19	94.8
20–24	90.6
25–29	83.3
30–34	72.8
35–39	60.1
40–44	48.2
45–49	28.9
50–54	20.4
55–59	12.3
60–64	7.9
65–69	7.6
70–74	2.8
75–79	0.3
80–84	0.0
85–89	0.0
90–94	0.0
95–100	0.0

Table 6 (Third-quintile (60^{th}-percentile) line): Average errors (differences between estimated and observed poverty likelihoods) for households by score range, with confidence intervals, from 1,000 bootstraps of n = 16,384, 2014 scorecard applied to the 2014 validation sample

	Ecart entre valeur estimée et réelle			
		Intervalle de confiance (±points de pourcentage)		
Score	Ecart	90 pour cent	95 pour cent	99 pour cent
0–4	–0.3	0.2	0.2	0.2
5–9	+2.0	1.4	1.7	2.4
10–14	–0.4	0.7	0.9	1.1
15–19	–0.8	1.4	1.5	2.2
20–24	–0.2	1.5	1.7	2.4
25–29	–5.2	3.4	3.5	3.7
30–34	–2.5	2.3	2.6	3.4
35–39	–6.0	4.4	4.6	5.4
40–44	+6.7	2.7	3.3	4.4
45–49	+0.8	2.4	2.8	3.6
50–54	+3.2	1.9	2.3	3.0
55–59	+0.3	1.8	2.1	2.6
60–64	–0.2	1.7	1.9	2.6
65–69	–0.3	1.7	2.1	2.6
70–74	+1.5	0.5	0.7	0.9
75–79	+0.3	0.0	0.0	0.0
80–84	0.0	0.0	0.0	0.0
85–89	0.0	0.0	0.0	0.0
90–94	0.0	0.0	0.0	0.0
95–100	0.0	0.0	0.0	0.0

Table 7 (Third-quintile (60th-percentile) line): Errors (average differences between estimated poverty rates and observed rates) for groups at a point in time by sample size, with confidence intervals, for 1,000 bootstraps of various sample sizes, 2014 scorecard applied to the 2014 validation sample

Taille de l'échantillon	Ecart entre valeur estimée et réelle			
		Intervalle de confiance (±points de pourcentage)		
n	Ecart	90 pour cent	95 pour cent	99 pour cent
1	0.0	62.3	78.9	92.5
4	–0.1	29.5	37.2	48.7
8	+0.1	21.6	26.0	32.8
16	+0.1	14.0	16.4	21.4
32	–0.2	9.9	12.2	15.2
64	–0.2	7.4	8.5	11.3
128	–0.2	5.0	6.0	7.7
256	–0.3	3.4	4.1	5.4
512	–0.3	2.6	3.0	4.3
1,024	–0.2	1.8	2.1	2.9
2,048	–0.3	1.2	1.5	2.0
4,096	–0.2	0.9	1.1	1.3
8,192	–0.2	0.6	0.7	1.0
16,384	–0.2	0.4	0.5	0.7

Table 11 (Third-quintile (60^{th}-percentile) line): Percentages of households by cut-off score and targeting classification, along with the hit rate and BPAC, 2014 scorecard applied to the 2014 validation sample

Point de coupure	Inclusion: <Seuil de pauvreté judicieusement ciblé	Défaut de couverture: <Seuil de pauvreté par erreur non ciblé	Fuite: >=Seuil de pauvreté par erreur ciblé	Exclusion: >=Seuil de pauvreté judicieusement non ciblé	Taux de succès: Inclusion + Exclusion	BPAC Voir texte
<=4	1.6	44.0	0.0	54.3	56.0	–92.8
<=9	3.7	42.0	0.1	54.3	57.9	–83.8
<=14	7.7	38.0	0.1	54.2	61.9	–66.2
<=19	12.8	32.8	0.4	54.0	66.8	–43.0
<=24	19.8	25.9	1.2	53.2	73.0	–10.7
<=29	26.6	19.1	2.2	52.1	78.7	+21.2
<=34	32.3	13.3	4.5	49.8	82.1	+51.5
<=39	36.7	8.9	6.8	47.5	84.2	+75.7
<=44	40.1	5.6	10.8	43.6	83.7	+76.5
<=49	42.3	3.3	15.6	38.7	81.1	+65.9
<=54	43.8	1.9	20.8	33.5	77.3	+54.4
<=59	44.6	1.0	26.5	27.9	72.5	+42.0
<=64	45.1	0.5	32.6	21.8	66.9	+28.7
<=69	45.5	0.1	38.0	16.3	61.9	+16.8
<=74	45.7	0.0	44.3	10.0	55.7	+2.9
<=79	45.7	0.0	48.8	5.6	51.2	–6.8
<=84	45.7	0.0	51.7	2.7	48.3	–13.1
<=89	45.7	0.0	53.7	0.7	46.3	–17.5
<=94	45.7	0.0	54.3	0.1	45.7	–18.9
<=100	45.7	0.0	54.3	0.0	45.7	–19.0

Inclusion, défaut de couverture, fuite, et exclusion normalisés à 100.

Table 12 (Third-quintile (60^{th}-percentile) line): Share of all households who are targeted (that is, score at or below a cut-off), the share of targeted households who are poor, the share of poor households who are targeted, and the number of poor households who are successfully targeted (inclusion) per non-poor household mistakenly targeted (leakage), 2014 scorecard applied to the 2014 validation sample

Point de coupure	% ménages ciblés	% ciblés qui sont pauvres	% pauvres qui sont ciblés	Ménages pauvres ciblés par ménage non pauvre ciblé
<=4	1.6	100.0	3.6	Uniquemente pauvres ciblés
<=9	3.7	98.5	8.0	66.9:1
<=14	7.8	98.3	16.8	56.7:1
<=19	13.2	97.3	28.1	35.5:1
<=24	21.0	94.4	43.3	16.9:1
<=29	28.8	92.2	58.2	11.9:1
<=34	36.9	87.7	70.8	7.2:1
<=39	43.5	84.3	80.4	5.4:1
<=44	50.9	78.9	87.8	3.7:1
<=49	57.9	73.1	92.7	2.7:1
<=54	64.6	67.8	95.8	2.1:1
<=59	71.1	62.8	97.7	1.7:1
<=64	77.7	58.1	98.8	1.4:1
<=69	83.5	54.5	99.7	1.2:1
<=74	90.0	50.7	100.0	1.0:1
<=79	94.4	48.3	100.0	0.9:1
<=84	97.3	46.9	100.0	0.9:1
<=89	99.3	46.0	100.0	0.9:1
<=94	99.9	45.7	100.0	0.8:1
<=100	100.0	45.7	100.0	0.8:1

Tables for
the Fourth-Quintile (80th-Percentile) Poverty Line

Table 4 (Fourth-quintile (80th-percentile) line): Estimated poverty likelihoods associated with scores

Score	Probabilité que le ménage ait de dépenses de consommation en dessous du seuil de pauvreté
0–4	100.0
5–9	100.0
10–14	100.0
15–19	100.0
20–24	99.1
25–29	97.2
30–34	95.7
35–39	86.4
40–44	82.3
45–49	71.7
50–54	60.0
55–59	42.7
60–64	35.2
65–69	30.5
70–74	19.7
75–79	9.6
80–84	1.6
85–89	0.0
90–94	0.0
95–100	0.0

Table 6 (Fourth-quintile (80th-percentile) line): Average errors (differences between estimated and observed poverty likelihoods) for households by score range, with confidence intervals, from 1,000 bootstraps of n = 16,384, 2014 scorecard applied to the 2014 validation sample

	Ecart entre valeur estimée et réelle			
		Intervalle de confiance (±points de pourcentage)		
Score	Ecart	90 pour cent	95 pour cent	99 pour cent
0–4	0.0	0.0	0.0	0.0
5–9	+0.3	0.3	0.4	0.4
10–14	0.0	0.0	0.0	0.0
15–19	+0.3	0.3	0.3	0.4
20–24	+0.4	0.6	0.6	0.8
25–29	–1.0	0.8	0.9	1.0
30–34	–0.5	0.8	1.0	1.2
35–39	–6.6	3.9	4.0	4.2
40–44	+5.4	2.3	2.8	3.9
45–49	+1.0	2.8	3.3	4.2
50–54	+16.3	3.0	3.4	4.4
55–59	–5.7	4.4	4.8	5.4
60–64	+1.7	2.7	3.3	4.4
65–69	–4.5	3.7	4.0	4.4
70–74	+8.5	1.8	2.2	3.1
75–79	+2.3	1.5	1.8	2.3
80–84	+0.4	0.9	1.0	1.3
85–89	–0.6	0.6	0.7	0.8
90–94	0.0	0.0	0.0	0.0
95–100	0.0	0.0	0.0	0.0

Table 7 (Fourth-quintile (80th-percentile) line): Errors (average differences between estimated poverty rates and observed rates) for groups at a point in time by sample size, with confidence intervals, for 1,000 bootstraps of various sample sizes, 2014 scorecard applied to the 2014 validation sample

Taille de l'échantillon	Ecart entre valeur estimée et réelle			
		Intervalle de confiance (±points de pourcentage)		
n	Ecart	90 pour cent	95 pour cent	99 pour cent
1	+0.8	64.5	75.9	91.3
4	0.0	29.0	35.3	46.4
8	+0.6	21.9	26.4	33.2
16	+0.8	15.2	17.9	24.8
32	+0.9	10.7	12.4	17.9
64	+1.0	7.6	8.9	11.9
128	+1.1	5.4	6.3	8.6
256	+1.1	3.9	4.6	6.4
512	+1.1	2.6	3.2	4.5
1,024	+1.1	1.9	2.3	3.0
2,048	+1.0	1.3	1.6	2.1
4,096	+1.0	0.9	1.1	1.5
8,192	+1.1	0.7	0.8	1.0
16,384	+1.1	0.5	0.6	0.8

Table 11 (Fourth-quintile (80th-percentile) line): Percentages of households by cut-off score and targeting classification, along with the hit rate and BPAC, 2014 scorecard applied to the 2014 validation sample

Point de coupure	Inclusion: <Seuil de pauvreté judicieusement ciblé	Défaut de couverture: <Seuil de pauvreté par erreur non ciblé	Fuite: >=Seuil de pauvreté par erreur ciblé	Exclusion: >=Seuil de pauvreté judicieusement non ciblé	Taux de succès: Inclusion + Exclusion	BPAC Voir texte
<=4	1.6	64.3	0.0	34.1	35.7	–95.0
<=9	3.7	62.2	0.0	34.1	37.8	–88.7
<=14	7.8	58.2	0.0	34.1	41.8	–76.4
<=19	13.1	52.8	0.0	34.0	47.2	–60.1
<=24	20.8	45.1	0.1	33.9	54.7	–36.6
<=29	28.5	37.4	0.3	33.8	62.2	–13.1
<=34	36.1	29.8	0.8	33.3	69.4	+10.6
<=39	42.2	23.8	1.4	32.7	74.9	+30.0
<=44	48.0	17.9	2.8	31.2	79.3	+50.0
<=49	53.2	12.7	4.7	29.3	82.5	+68.6
<=54	56.8	9.2	7.8	26.3	83.0	+84.0
<=59	60.1	5.8	11.0	23.1	83.2	+83.3
<=64	62.7	3.2	15.0	19.1	81.8	+77.2
<=69	64.7	1.2	18.9	15.2	79.9	+71.4
<=74	65.4	0.5	24.6	9.5	75.0	+62.8
<=79	65.9	0.1	28.6	5.5	71.4	+56.6
<=84	65.9	0.0	31.4	2.7	68.6	+52.3
<=89	65.9	0.0	33.4	0.7	66.6	+49.3
<=94	65.9	0.0	34.0	0.1	66.0	+48.4
<=100	65.9	0.0	34.1	0.0	65.9	+48.3

Inclusion, défaut de couverture, fuite, et exclusion normalisés à 100.

Table 12 (Fourth-quintile (80th-percentile) line): Share of all households who are targeted (that is, score at or below a cut-off), the share of targeted households who are poor, the share of poor households who are targeted, and the number of poor households who are successfully targeted (inclusion) per non-poor household mistakenly targeted (leakage), 2014 scorecard applied to the 2014 validation sample

Point de coupure	% ménages ciblés	% ciblés qui sont pauvres	% pauvres qui sont ciblés	Ménages pauvres ciblés par ménage non pauvre ciblé
<=4	1.6	100.0	2.5	Uniquemente pauvres ciblés
<=9	3.7	99.6	5.6	248.6:1
<=14	7.8	99.8	11.8	521.0:1
<=19	13.2	99.7	19.9	286.3:1
<=24	21.0	99.3	31.6	141.7:1
<=29	28.8	98.9	43.2	90.5:1
<=34	36.9	97.9	54.7	46.9:1
<=39	43.5	96.9	64.0	31.0:1
<=44	50.9	94.4	72.9	17.0:1
<=49	57.9	91.8	80.7	11.2:1
<=54	64.6	87.9	86.1	7.3:1
<=59	71.1	84.6	91.2	5.5:1
<=64	77.7	80.7	95.1	4.2:1
<=69	83.5	77.4	98.1	3.4:1
<=74	90.0	72.7	99.3	2.7:1
<=79	94.4	69.7	99.9	2.3:1
<=84	97.3	67.7	100.0	2.1:1
<=89	99.3	66.4	100.0	2.0:1
<=94	99.9	66.0	100.0	1.9:1
<=100	100.0	65.9	100.0	1.9:1