Simple Poverty Scorecard®
Poverty-Assessment Tool
Pakistan

Mark Schreiner

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This document and related tools are available at `SimplePovertyScorecard.com`.

Abstract

The Simple Poverty Scorecard®-brand poverty-assessment tool uses 10 low-cost indicators from Pakistan's 2005/6 Social and Living Standards Measurement Survey to estimate the likelihood that a household has consumption below a given poverty line. Field workers can collect responses in about ten minutes. Accuracy is reported for a range of poverty lines. The scorecard is a practical way for pro-poor programs in Pakistan to measure poverty rates, to track changes in poverty rates over time, and to segment clients for differentiated treatment.

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Author

Mark Schreiner directs Microfinance Risk Management, L.L.C. He is also a Senior Scholar at the Center for Social Development at Washington University in Saint Louis.

Simple Poverty Scorecard® Poverty-Assessment Tool

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

Indicator	Response	Points	Score
1. In what province does the household live?	A. Balochistan	0	
	B. Northwest Frontier Province	9	
	C. Sindh	11	
	D. Punjab or Islamabad	12	
2. How many household members are 13-years-old or younger?	A. Five or more	0	
	B. Four	6	
	C. Three	11	
	D. Two	15	
	E. One	22	
	F. None	31	
3. How many children ages 5 to 13 attend school?	A. Not all	0	
	B. All, or no children ages 5 to 13	5	
4. How many household members work in elementary occupations (not senior officials, managers, professionals, technicians or associated professionals, clerks, salespeople, service or shop workers, skilled workers in agriculture or fishery, craft or trade workers, or plant/machinery operators)?	A. Two or more	0	
	B. One	5	
	C. None	12	
5. What is the highest educational level completed by the female head/spouse?	A. Less than Class 1 or no data	0	
	B. No female head/spouse	4	
	C. Class 1 or higher	6	
6. What is the main source of drinking water for the household?	A. Others	0	
	B. Hand pump, covered/closed well, motorized pump/tube well, or piped water	3	
7. What type of toilet is used by your household?	A. None or other	0	
	B. Flush connected to pit/septic tank or open drain	2	
	C. Flush connected to public sewerage	4	
8. Does the household own a refrigerator or freezer?	A. No	0	
	B. Yes	12	
9. Does the household own a television?	A. No	0	
	B. Yes	3	
10. Does the household own a motorcycle, scooter, car, or other vehicle?	A. No	0	
	B. Yes	12	

Score:

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Pakistan

1. Introduction

This paper presents the Simple Poverty Scorecard®-brand poverty-assessment tool. Pro-poor programs in Pakistan can use it to estimate the likelihood that a household has consumption below a given poverty line, to measure groups' poverty rates at a point in time, to track changes in groups' poverty rates over time, and to segment participants for differentiated services.

The direct approach to poverty measurement via surveys is difficult and costly, asking households about a lengthy list of items such as "Did household members consume any potatoes during the last 14 days? If yes, were any of the potatoes purchased? If yes, how much potato was purchased, and for what price? If any potato was consumed that was not purchased, how much was consumed, and what was its value? Now then, did household members consume any onions during the last 14 days? . . ." As a case in point, the 2005/6 Pakistan Social and Living Standards Measurement Survey (PSLM) runs 45 pages.

In contrast, the indirect approach via the Simple Poverty Scorecard® is quick and inexpensive. It uses ten verifiable indicators (such as "What is the main source of drinking water for the household?" or "Does the household own a television?") to get a

score that is highly correlated with poverty status as measured by consumption in the exhaustive PSLM survey.

The scorecard here differs from "proxy means tests" (Coady, Grosh, and Hoddinott, 2002) in that 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 these local organizations are typically subjective and relative (such as participatory wealth ranking by skilled field workers) or blunt (such as rules based on land-ownership or housing quality). These approaches may be costly, their results are not comparable across organizations nor across countries, and their accuracy and precision are unknown.

Suppose an organization wants to know what share of its participants are below a poverty line, perhaps because it wants to relate is participants' poverty status to the Millennium Development Goals' $1.25/day poverty line at 2005 purchase-power parity. Or—as required of USAID microenterprise partners—an organization might want to report how many of its participants are among the poorest half of people below the national poverty line. Or an organization might want to measure movement across a poverty line (see, for example, Daley-Harris, 2009). In all these cases, what is needed is an consumption-based, objective tool with known accuracy. While consumption surveys are costly even for governments, many small, local organizations can implement an inexpensive poverty-assessment tool that can serve for monitoring, management, and targeting.

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, 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 three 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 presented (when they are presented at all) as tables of regression coefficients incomprehensible to non-specialists (with cryptic indicator names such as "`LGHHSZ_2`", negative points, and points with many decimal places). Thanks to the predictive-modeling phenomenon known as the "flat max", simple scorecards are about as accurate as complex ones.

The technical approach here is also 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 here are simple and standard 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 the 2005/6 PSLM conducted by Pakistan's Federal Bureau of Statistics. 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

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 five to 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 consumption (or per-capita consumption) below a given poverty line.

Second, the scorecard can estimate the poverty rate of a group of households at a point in time. This is simply the average poverty likelihood among the households in the group.

Third, the scorecard can estimate changes in the poverty rate for a given group of households (or for two independent samples of households that are representative of the same population) between two points in time. This estimate is the change in the average poverty likelihood of the group(s) of households over time.

The scorecard can also be used for targeting services to poorer households. To help managers choose a targeting cut-off, this paper reports several measures of targeting accuracy for a range of possible cut-offs.

This paper presents a single scorecard whose indicators and points are derived from data on household consumption and Pakistan's national poverty line. Scores from this scorecard are calibrated to poverty likelihoods for nine poverty lines.

The scorecard is constructed and calibrated using a sub-sample of the data from the 2005/6 PSLM. Its accuracy is then validated on a different sub-sample from the 2005/6 PSLM as well as on the entire 2004/5 PSLM and the 2000/1 Pakistan Integrated Household Survey (PIHS). While all three scoring estimators are unbiased when applied to the population from which they were derived (that is, they match the true value on average in repeated samples from the same population from which the scorecard was built), they are—like all predictive models—biased to some extent when applied to a different population.[1]

Thus, while the indirect scoring approach is less costly than the direct survey approach, it is also biased in practice. (The direct survey approach is unbiased by definition.) There is bias because scoring must assume that the future relationships between indicators and poverty will be the same as in the data used to build the scorecard. It must also assume that these relationships will be the same in all sub-groups as in the population as a whole.[2] Of course, these assumptions—ubiquitous and inevitable in predictive modeling—hold only partly.

When applied to the 2005/6 validation sample for Pakistan with $n = 16{,}384$, the difference between scorecard estimates of groups' poverty rates and the true rates at a

[1] Examples of "different populations" include nationally representative samples at another point in time or non-representative sub-groups (Tarozzi and Deaton, 2007).
[2] Bias may also result from changes in the quality of data collection over time, from changes over time in the real value of poverty lines, from imperfect adjustment of poverty lines to account for differences in cost-of-living across time or geographic regions, or from sampling variation across surveys.

point in time is +1.1 percentage points for 100% of the national poverty line. Across all nine lines, the average absolute difference is 0.9 percentage points, and the maximum absolute difference is 2.0 percentage points. Because the 2005/6 validation sample is representative of the same population as the data that was used to construct the scorecard and because all the data comes from the same time frame, the scorecard estimators are unbiased and these observed differences are due to sampling variation; the average difference would be zero if the whole 2005/6 PSLM were to be repeatedly redrawn and divided into sub-samples before repeating the entire scorecard-building and accuracy-testing process.

For $n = 16{,}384$, the 90-percent confidence intervals for these estimates are ± 0.6 percentage points or less. For $n = 1{,}024$, these intervals are ± 2.3 percentage points or less.

When the scorecard built from the 2005/6 construction and calibration samples is applied with $n = 16{,}384$ to both the 2005/6 validation sample and the entire 2004/5 PSLM to measure change between two points in time, the difference between scorecard estimates and true values for changes in groups' poverty rates is –2.5 percentage points for 100% of the national line. Thus, while the true change was –3.6 percentage points from 2004/5 to 2005/6, the scorecard estimates a change of –5.1 percentage points. Across all nine lines, the average absolute difference between the estimated change and the true change for 2004/5 and 2005/6 is about 2.4 percentage points, which on average is about 130 percent larger (in absolute value) than the true change. For $n = 16{,}384$,

the 90-percent confidence intervals for these estimates of change are ±0.9 percentage points or less.

Section 2 below describes data and poverty lines. Section 3 places the new scorecard here in the context of existing poverty-assessment tools for Pakistan. Sections 4 and 5 describe scorecard construction and offer practical guidelines for use. Sections 6 and 7 detail the estimation of households' poverty likelihoods and of groups' poverty rates at a point in time. Section 8 discusses estimating changes in poverty rates, and Section 9 covers targeting. The final section is a summary.

2. Data and poverty lines

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

2.1 Data

The scorecard is based on data from the 15,439 households in the 2005/6 PSLM. Households are randomly divided into three sub-samples (Figure 2):

- *Construction* for selecting indicators and points
- *Calibration* for associating scores with poverty likelihoods
- *Validation* for measuring accuracy on data not used in construction or calibration

In addition, the 14,693 households in the 2004/5 PSLM and the 15,799 households in the 2000/1 PIHS are used in the validation of estimates of changes in poverty rates for two independent samples between two points in time. None of the three surveys cover Azad Jammu and Kashmir, FATA, or the Northern Areas.

2.2 Poverty rates and poverty lines

2.2.1 Rates

As a general definition, the *poverty rate* is the share of people in a given group who live in households whose total household consumption (divided by the number of members or the number of adult equivalents) is below a given poverty line.

Beyond this general definition, there two special cases, *household-level poverty rates* and *person-level poverty rates*. With household-level rates, each household is counted as if it had only one person, regardless of true household size, so all households are counted equally. With person-level rates (the "head-count index"), each household is weighted by the number of people in it, so larger households have greater weight.

For example, consider a group of two households, the first with one member and the second with two members. Suppose further that the first household has per-capita or per-adult-equivalent consumption above a poverty line (it is "non-poor") and that the second household has per-capita or per-adult-equivalent consumption below a poverty line (it is "poor"). The household-level rate counts both households as if they had only one person and so gives a poverty rate for the group of $1 \div (1 + 1) = 50$ percent. In contrast, the person-level rate weighs each household by the number of people in it and so gives a poverty rate for the group of $2 \div (1 + 2) = 67$ percent.

Whether the household-level rate or the person-level rate is most relevant depends on the situation. If an organization's "participants" include all the people in a household, then the person-level rate is relevant. Governments, for example, are concerned with the well-being of their people, regardless of how those people are arranged in households, so governments typically report person-level poverty rates.

If an organization has only one "participant" per household, however, then the household-level rate is relevant. For example, if a microfinance organization has only one client in a household, then it might want to report household-level poverty rates.

The scorecard here is constructed using the 2005/6 PSLM and household-level lines, scores are calibrated to household-level poverty likelihoods, and accuracy is measured for household-level rates. This use of household-level rates reflects the belief that they are the most relevant for most pro-poor organizations.

In any case, organizations can estimate person-level poverty rates by taking a household-size-weighted average of the household-level poverty likelihoods. It is also possible to construct a scorecard based on person-level lines, to calibrate scores to person-level likelihoods, and to measure accuracy for person-level rates, but it is not done here.

2.2.2 Poverty lines

Based on Pakistan's 2000/1 PIHS, 2004/5 PSLM, and 2005/6 PSLM, Figure 3 reports poverty rates and poverty lines by urban/rural and for all-Pakistan at both the household level and the person level.

Pakistan defines an official poverty line in terms of the food and non-food consumption observed by households whose food consumption is close to a guideline of 2,350 calories per day per adult equivalent.[3] For the PIHS 2000/1, this national line is PKR23.78 per adult equivalent per day (Cheema, 2006, revising slightly downward World Bank, 2004). This implies an all-Pakistan poverty rate of 29.1 percent at the household level and 35.4 percent at the person level (Figure 3). For the PSLM 2004/5, the national line is based on the Bureau of Statistics' implementation of the process in

[3] Figure 4 documents the age- and sex-specific caloric guidelines.

Cheema (2006) and is PKR28.89 (Akhtar and Sadiq, 2008), giving household- and person-level poverty rates of 23.3 and 28.6 percent. Finally, for the PSLM 2005/6, the national line is PKR31.05, with poverty rates of 19.8 and 25.3 percent.

In this paper, the national poverty line is usually referred to as "100% of the national line" to distinguish it from the four other official lines related to it: 50% of the national line, 75% of the national line, 125% of the national line, and 200% of the national line.[4]

The five all-Pakistan national lines are adjusted for differences in prices across time and geography via deflators derived from survey data at the level of the primary sampling unit. For the three survey rounds in this paper, household consumption and PSU-level deflators are computed based on Cheema (2006). Although Cheema's detail is exceptional in the literature on poverty measurement, some parts of the process remain undocumented, so results here may differ somewhat from those that would obtain under full replication.

It is ironic that while the central purpose of the 2000/1 PIHS, 2004/5 PSLM, and 2005/6 PSLM is to provide estimates of consumption, the data provided by the Federal Bureau of Statistics do not include the official measures of aggregate household consumption nor deflators. Moreover, the Bureau denied direct requests for these

[4] Pakistan labels households under 50% of the national line as "extremely poor", those between 50–75% as "ultra poor", 75–100% as "poor", 100–125% as "vulnerable", 125–200% as "quasi-non-poor", and those above 200% of the national line as "non-poor".

figures.[5] The World Bank likewise refused to share its figures for 2005/6. Of course, the algorithms and results used in the present paper are available on request.

The national poverty lines apply to Pakistan as a whole. These are adjusted for differences in cost-of-living across geography and across time (field work for each of the surveys lasted 12 months) using $L_i = L \cdot \pi_i \cdot \left(\sum_{j=1}^{N} p_j \cdot \pi_j \right)^{-1}$, where L_i is the PSU-specific poverty line based on a given all-Pakistan national line L, i is a PSU index, π_i is a PSU-level price deflator, N is the number of PSUs, and p_i is the PSU-level population (persons or households) proportion.

The all-Pakistan poverty lines in Figure 3 are the household- or person-weighted average of the urban and rural lines that are in turn weighted averages of the PSU-level lines L_i.

Figure 2 shows that across the five national lines, household-level poverty rates decreased from 2000/1 to 2004/5 and then again from 2004/5 to 2005/6 (except for households between 125–200% of the national line). In percentage terms compared with the initial 2000/1 poverty rates, the improvements by 2005/6 are on the order of 50 percent for the 50% and 75% lines, 33 percent for the 100% line, 25 percent for the 125% line, and 10 percent for the 200% line. These are large improvements.

[5] In their response, the Bureau noted that, as in this paper, they could implement only an approximation of Cheema's process.

Because local pro-poor organizations may want to use different or various poverty lines, this paper calibrates scores from its single scorecard to poverty likelihoods not only for the five national lines already discussed but also for four additional lines. The first of these is the USAID "extreme" line, defined by U.S Congress (2002) as the median consumption of people (not households) below 100% of the national line. The final three lines are based on USD1.25/day at 2005 purchase-power parity, derived from:

- 2005 PPP exchange rate for "individual consumption consumption by households" (International Comparison Project, 2008): PKR20.71 per $1.00
- Price deflators:[6] 104.828 for the 2000/1 PIHS, 127.006 for the 2004/5 PSLM, 136.522 for the 2005/6 PSLM, and 131.764 for 2005 on average

Using the formula in Sillers (2006), the all-Pakistan USD1.25/day 2005 PPP line for the period of the field work of the 2005/6 PSLM is:

$$\left(\text{2005 PPP exchange rate}\right) \cdot \text{USD1.25} \cdot \frac{\text{CPI}_{\text{2005/6}}}{\text{CPI}_{\text{Ave. 2005}}} =$$

$$\left(\frac{\text{PKR20.71}}{\text{USD1.00}}\right) \cdot \text{USD1.25} \cdot \frac{136.522}{131.764} = \text{PKR26.82}.$$

[6] This uses the consumer price index at `http://www.statpak.gov.pk/depts/fbs/statistics/yearly_inflation/yearly_inflation.html`, accessed 17 August 2009. The price index is set to 100 for 2000/1, so the index for 2001/2 is 103.996, and the index for 2002/3 is 107.413. The 2000/1 PIHS was fielded in the last three quarters of 2001 and the first quarter of 2002, so its deflator is found as ($\text{CPI}_{\text{2001/2}}$ x 0.75) + ($\text{CPI}_{\text{2002/3}}$ x 0.25) = (103.966 x 0.75) + (107.413 x 0.25) = 104.828. The deflator for the 2004/5 PSLM is taken as this index, multiplied by the ratio of the 2004/5 national poverty line to the 2000/1 line, or 127.006. The deflator for the 2005/6 PSLM is then this index, multiplied by the ratio of the 2005/6 national line to the 2004/5 line, or 136.522. Finally, the average index for 2005 is taken as the average of the 2004/5 and 2005/6 indices, or 131.764.

The all-Pakistan USD1.25/day 2005 PPP lines for the 2000/1 PIHS and the 2004/5 PSLM are computed in the same way. The USD2.50/day line is twice the USD1.25/day line, and the USD3.75/day line is three times the USD1.25/day line.

3. The context of poverty-assessment tools for Pakistan

This section discusses existing poverty-assessment tools for Pakistan in terms of their goals, methods, poverty lines, indicators, costs, accuracy, and precision. The relative strengths of the scorecard here are:

- It reports accuracy, precision, and formula for standard errors based on out-of-sample tests
- It is the simplest
- It uses more recent data
- It is calibrated to more poverty lines, including all the official ones
- It is about as accurate as the others

3.1 Jamal

Jamal (2007a) uses the 2004/5 PSLM to construct poverty-assessment tools that, when applied to data from Pakistan's 2004/5 Core Welfare Indicator Questionnaire (CWIQ), produce more precise estimates of poverty rates for Pakistan's provinces and districts than would be possible using only the PSLM. This is the "poverty mapping" approach of Elbers, Lanjouw, and Lanjouw (2003), and it works because although the CWIQ does not collect income data, it does collect some poverty indicators, and it collects them for 76,500 households.

Jamal builds two tools (urban and rural) using stepwise ordinary least squares on total household income in the 2004/5 PSLM, considering only indicators found both in the PSLM and in the 2004/5 CWIQ. The tools are then applied to households in the CWIQ, dividing the result by household size and estimating poverty status based on the

poverty lines in Jamal (2007b). Finally, a district's poverty rate is estimated as the average estimated poverty status of CWIQ households in the district.[7]

Jamal's urban and rural tools use the following indicators:

- Demographics:
  - — Number of household members
  - — Dependency ratio
  - — Number of earners
  - — Age of head (and its square)
- Education:
  - — Highest educational attainment by a male
  - — Highest educational attainment by a female
  - — Educational attainment by head
  - — Number of primary-school-age children who do not attend school
  - — Number of secondary-school-age children who do not attend school
- Employment:
  - — Whether the head has wage employment
  - — Whether the household is non-agricultural
  - — Whether the household sharecrops in (*hari*)
- Residence characteristics:
  - — Type of roof
  - — Type of structure
  - — Type of toilet/sewer system
  - — Type of cooking fuel
  - — Presence of telephone
  - — Presence of non-residential property
  - — People per room

[7] Jamal (2005) is similar to Jamal (2007a) in that makes a poverty map from urban and rural scorecards, this time with the 2000/1 PIHS. Because there is no corresponding CWIQ data, however, Jamal (2005) applies the scorecards back on the same 2001/1 PIHS data that was used to create them, reporting the resulting estimates of poverty rates for provinces and districts. The usefulness of this is unclear, because these rates could be estimated directly from income data in the 2000/1 PIHS.

- Ownership of specific assets:
    - — Telephone
    - — Livestock
    - — Non-residential property/buildings/houses
    - — Non-agricultural land
    - — Table/chair
    - — Bicycle
    - — Clock
    - — Television
    - — Iron
    - — Fan
    - — Video-cassette player
    - — Refrigerator
    - — Motorcycle
    - — Air conditioner
    - — Air cooler
    - — Computer
    - — Car
    - — Tractor
- Location of residence:
    - — Large city
    - — Province

The poverty-mapping approach in Jamal and the poverty-scoring approach in this paper are similar in that they both:

- Build scorecards with nationally representative survey data and then apply them to other data on sub-groups that may not be nationally representative
- Use simple, verifiable indicators that are quick and inexpensive to collect
- Provide unbiased estimates when their assumptions hold
- Are used to estimate poverty rates for groups
- Have similar targeting accuracy

Strengths of poverty mapping include that it:

- Has formally established theoretical properties
- Can be applied straightforwardly to measures of well-being beyond poverty rates
- Requires less data for scorecard construction and calibration
- Includes community-level indicators
- Uses only indicators that appear in a census

Strengths of the scorecard include that it:

- Is simpler in terms of both construction and application
- Tests accuracy empirically
- Associates poverty likelihoods with scores non-parametrically
- Uses judgment and theory in scorecard construction to reduce overfitting
- Estimates poverty likelihoods for individual households
- Reports simple formulas for standard errors
- Seeks to be useful in practice and so aims to be understood by non-specialists

The basic difference between the two approaches is that poverty mapping seeks to help governments design pro-poor policies, while the scorecard seeks to help small, local pro-poor organizations to manage their outreach when implementing policies.[8]

Jamal has the best estimates of district-level poverty rates in Pakistan. At the same time, the accuracy of these estimates is not reported, and although a central strength of poverty mapping is the ability to report standard errors, none are reported. These omissions preclude a comparison with estimates of poverty rates in this paper.[9]

The two poverty-assessment tools can, however, be compared in terms of targeting accuracy. The data in Jamal's Table 1 can be translated to measures of *inclusion* (the share of households correctly predicted to be below a poverty line), *undercoverage* (share incorrectly predicted to be above a line), *leakage* (share incorrectly

[8] Another apparent difference is that the developers of poverty mapping say that it is too inaccurate to be used for targeting individual households or persons (Demombynes *et al.*, 2002; Elbers, Lanjouw, and Lanjouw, 2003), while Schreiner (2008c) supports such targeting as a legitimate, potentially useful application of the scorecard.

[9] It should be noted that the first paragraph of section 2 in Jamal is the same as the last paragraph in section 2 of Elbers, Elbers, and Lanjouw (2003), and that other parts of section 2 in Jamal are copied, without acknowledgment, from Fofack (2000).

predicted to be below a line), and *exclusion* (share correctly predicted to be above a line). These measures can also be computed for the new scorecard here.[10] The set-up of the comparison favors Jamal, whose test is in-sample and in-time (that is, it is tested on the same data used to construct the scorecards, a situation known to overstate accuracy), while the new scorecard here tests out-of-sample and out-of-time (it uses a scorecard based on the 2005/6 PSLM to predict poverty status in the 2004/5 PSLM).

For the score cut-off that matches undercoverage for the new scorecard here to that in Jamal's tool (15.8 percent and 15.6 percent), the new scorecard has better inclusion (14.5 versus Jamal's 13.9). At this same cut-off, Jamal has less leakage (6.2 versus 9.9) and better exclusion (63.2 versus 60.0). Given sampling variation and that the set-up of the test favors Jamal, targeting accuracy for the two tools is about the same.[11] Still, users would likely favor the new scorecard, for two reasons. First, it is simpler; all weights are non-negative integers, and scores can be added up by hand in the field. In contrast, Jamal's tool has weights with four decimal places, negative signs, squares, and ratios. Second, the new scorecard is quicker (and thus less costly) to implement, as a single 10-indicator scorecard applies to all of Pakistan rather than two tools for urban and rural, with 39 indicators between them.

[10] This requires calibration to a poverty line of PKR31.80 per adult-equivalent per day so as to match Jamal's all-Pakistan poverty rate of about 30 percent.

[11] This is yet another manifestation of the predictive modeling phenomenon known as the *flat max*, see Hand (2006) and other citations in Section 5.

3.2 Gwatkin *et al.*

Gwatkin *et al.* (2007) apply to Pakistan an approach used in 56 countries with Demographic and Health Surveys (Rutstein and Johnson, 2004). They use Principal Components Analysis to make a "wealth index" from simple, low-cost indicators available for the 7,193 households in Pakistan's 1990/1 DHS. The PCA index is like the scorecard here except that, because the DHS does not collect data on income or consumption, it is based on a relative definition of poverty, its accuracy is unknown, and it is only assumed to be a proxy for long-term wealth/economic status.[12] Other examples of the PCA-index approach are Stifel and Christiaensen (2007), Zeller *et al.* (2006), and Sahn and Stifle (2000).

The 16 indicators in Gwatkin *et al.* are similar to those in the new scorecard here in terms of their simplicity, low cost, and verifiability:

- Characteristics of the residence:
  - — Type of walls
  - — Type of roof
  - — Presence of electricity
  - — Source of drinking water
  - — Type of toilet arrangement
  - — Number of people per sleeping room
- Whether any household member works agricultural land

[12] Still, because the indicators are similar and because the "flat max" is important, carefully built PCA indices and consumption-based poverty-assessment tools probably pick up the same underlying construct (such as "permanent income", see Bollen, Glanville, and Stecklov, 2007), and they rank households much the same. Tests of how well PCA indices predict consumption include Filmer and Scott (2008), Lindelow (2006), Wagstaff and Watanabe (2003), and Montgomery *et al.* (2000).

- Ownership of consumer durables:
  - — Radio
  - — Television
  - — Refrigerator
  - — Bicycle
  - — Motorcycle
  - — Room cooler
  - — Washing machine
  - — Water pump
  - — Car, van, or tractor

Gwatkin *et al.* has three basic goals for their index:

- Segment people by quintiles to see how health, population, and nutrition vary with socio-economic status
- Monitor (via exit surveys) how well health-service points reach the poor
- Measure coverage of services via local, small-scale surveys

The first goal is akin to targeting, and the last two goals resemble the monitoring goals here, so the uses of the index are more or less the same as those of the scorecard here. But the index is more difficult to use. Although it has only 16 indicators, and although it is presented on a single page that could be photocopied, it cannot be computed by hand in the field, as it has 35 weights, some of them negative, and all of them with five decimal places.

Finally, the scorecard here—unlike the PCA index—is linked directly to an absolute, consumption-based poverty line. Thus, while both approaches can rank households, only the scorecard can estimate quantitative, consumption-based poverty status. Furthermore, relative accuracy (that is, ability to rank or target) is tested here more completely here than in Gwatkin *et al.*; generally, discussion of the accuracy of PCA indices rests on how well they correlate with health, education, or self-assessed

poverty, even though their construction does not explicitly take any such correlation into account.

3.3 Sahn and Stifel

Like this paper and like Gwatkin *et al.*, Sahn and Stifel (2003) seek a low-cost, practical way to measure poverty. They build an asset index using factor analysis (akin to PCA) and the 4,794 households in Pakistan's 1991 PIHS. Sahn and Stifel seek "to see if there exist simpler and less demanding alternatives to collecting data on consumption for purposes of measuring economic welfare and ranking households" (p. 484). Their motivation is similar to that of the new scorecard here: they want tools that are affordable and feasible given constraints on budgets and limits to users' technical savvy, and they want to make comparisons over time and geography without the complications and assumptions required for direct measurement via consumption surveys. Like this paper, they also seek a tool for targeting.

Sahn and Stifle's nine indicators are all simple, inexpensive, and verifiable:

- Residence quality:
  - Type of floor
  - Source of drinking water
  - Type of toilet arrangement
- Educational attainment of the head
- Ownership of consumer durables:
  - Radio
  - Television
  - Bicycle
  - Motorized transport

To check coherency between the asset index and reported consumption[13] in the 1991 PIHS and between the asset index and child nutrition, Sahn and Stifel rank Pakistani households based on the index, on consumption, and on height-for-age. For each pair of proxies, they judge the coherence of the two rankings by the distance between a given household's decile ranks. They conclude that the asset index predicts long-term nutritional status no worse than current consumption predicts long-term nutritional status. They also report that the asset index predicts consumption worse than does a least-squares regression (poverty-assessment tool) that predicts consumption based on household demographics, education, residence quality, and access to public services.

3.4 Filmer and Pritchett

Like Sahn and Stifle and Gwatkin *et al.*, Filmer and Pritchett (FP, 2001) use a PCA-based asset index as a proxy for economic status, in this case for a study of school enrollment in India (not Pakistan). FP's India data lacks consumption, so to check how well their asset index relates with consumption, they build another index using Pakistan's 1991 PIHS. Their purpose is not to develop a tool that local pro-poor organizations can use, and so they do not report indicators or points. FP's Pakistan index shares the same strengths and weakness as those in Sahn and Stifle and Gwatkin

[13] Sahn and Stifel check the index against consumption because consumption is a common proxy for living standards, not because they believe it should be the benchmark.

et al.: unlike a scorecard, the index is not linked to absolute poverty lines, so it cannot be used to estimate consumption-based poverty rates or changes in poverty rates.

3.5 Ferguson *et al.*

Ferguson *et al.* (2003) use Pakistan's 1991 PIHS to construct and test a hierarchical ordered probit (DIHOPIT) index that does not require consumption data and that is assumed to rank households by permanent income. DIHOPIT shares the basic strengths and weaknesses of the PCA-based indices discussed just above.

A unique feature of DIHOPIT is that it associates score thresholds with quantiles (in Ferguson *et al.*, medians) of the probability of observing specific responses. This shows which responses tend to change first as a household's index increases through time. For example, Pakistani households whose permanent income is increasing and who do not have a flush toilet nor a refrigerator are more likely to obtain a flush toilet before a refrigerator. This shows what assets households value most at different levels of poverty.

As in this paper, Ferguson *et al.* seek a simple, inexpensive, and thus practical tool. Their DIHOPIT scorecard for Pakistan uses 23 indicators, all of which are easy-to-collect and verifiable:

- Demographics:
  - Number of adults
  - Number of children
- Education:
  - Literacy of head
  - Numeracy of head
- Employment: Whether any household member works abroad
- Residence characteristics:
  - Type of wall
  - Type of floor
  - Source of drinking water
  - Type of toilet arrangement
  - Type of sewage disposal
  - Type of garbage disposal
  - Whether windows are covered
  - Presence of electricity
  - Number of rooms
- Ownership of durable goods:
  - Kerosene lamp
  - Television
  - Gas stove
  - Sewing machine
  - Refrigerator
  - Freezer
  - Telephone
  - Air conditioner
  - Room heater

To test accuracy, Ferguson *et al.* compare the correlations between DIHOPIT scores and reported consumption versus the correlations between PCA scores and reported consumption. Because the correlation coefficients are similar, they conclude that "both the DIHOPIT model and the PCA model are capturing similar information

about household permanent income or wealth". Ferguson *et al.* do not compare accuracy out-of-sample, and they do not report standard errors.

3.6 Benazir Income Support Program

Pakistan has announced plans to budget PKR68 billion (about USD1 billion) for monthly transfers of PKR1,000 to about 5 million of the poorest families through the Benazir Income Support Program (BISP). In its current incarnation, BISP beneficiaries are named by members of the National Assembly and by senators, with eligibility criteria left to these politicians.

The reduce mistargeting, the World Bank (2009)[14] has recommended that BISP use a poverty-assessment tool. To this end, the World Bank built a tool and piloted it with more than 500,000 households in 16 districts. The tool may eventually be applied to most Pakistani households.

The BISP tool (Appendix B) resembles the Simple Poverty Scorecard® here and in Schreiner (2006a) in many ways.[15] Indeed, the present author supported the World Bank as it replicated Schreiner (2006a), responding to queries and sharing his data for consumption and indicators from the 2000/1 PIHS and meeting with the team to answer questions about the poverty-scoring approach. The team then asked the author

[14] The acknowledgements of World Bank (2009) mention Paloma Acevedo, Xiaohui Hou, Ghazala Mansuri, Tara Vishwanath, and Nobou Yoshida.

[15] Even the main title of the World Bank paper ("A Poverty Scorecard for Pakistan") is like that of this paper and Schreiner (2006a), featuring the term *poverty scorecard* for essentially the first time as part of a title by someone other than the present author.

to build a scorecard for them for Pakistan, but this was not possible due to time constraints and previous commitments to build the scorecard documented here.

How does the BISP tool compare to the new scorecard here in terms of targeting accuracy? The comparison described below is imperfect for several reasons. First, the BISP tool is tested in-sample—a situation known to overstate accuracy—whereas the scorecard here is tested out-of-sample. This favors the BISP tool. In personal communication, the World Bank team says that in unreported results, they split the sample and rebuilt their tool and tested it out-of-sample, finding that "targeting error estimation was quite robust". World Bank (2009) draws on Narayan and Yoshida (2005), and in that paper, testing out-of-sample meant worse undercoverage and worse leakage, usually on the order of two to three percentage points (p. 20).[16]

Second, the comparison is imperfect because the two tools are based on different deflators and measures of consumption. When asked, the World Bank declined to share this data. This favors the new scorecard here.

Third, the BISP tool uses person-level weights, while the new scorecard here uses household-level weights. The comparison below applies both tools to people, which favors the BISP tool.

Fourth, the BISP tool has more indicators (twelve versus ten) and more complex indicators. These include the number of people less than 18 years old or more than 65

[16] This may understate the overstatment in accuracy due to testing in-sample, as Narayan and Yoshida's test is not completely out-of-sample; indicators are selected from the full sample, with only points estimated from the half-sample.

(versus number of people 13 years old or younger), the number of rooms per person (requiring two questions, one for household size and one for number of rooms), and the amount of land owned. This favors the BISP tool.

Using 100% of the national poverty line, both tools are applied to the 2005/6 validation sample and their accuracy compared via ROC curves (Appendix B).[17] In the simplest terms, the farther the smooth interior ROC curves are from the diagonal, the greater the targeting accuracy.

More formally, the horizontal axis of the figure in Appendix B plots the share of all people targeted, where the lowest-scoring households are targeted first. The vertical axis is the share of poor people successfully targeted (smooth curves bending toward the upper-left corner) and the share of non-poor people mistakenly targeted (smooth curves bending toward the lower-right corner). The farther apart these two curves, the greater the targeting accuracy.

The ROC figure in Appendix B shows targeting accuracy for the BISP tool (thick solid interior curves) versus the new scorecard here (thin solid interior curves). These two sets of curves lie between the extremes of no targeting (dotted line on the diagonal) and perfect targeting (thick "hockey stick" lines framing the interior curves).

The ROC figure brings two points into sharp relief. First, targeting is not bad—especially for the lowest- and highest-scoring households—but it is also not perfect.

[17] Receiver Operating Characteristic curves are a standard way to compare targeting accuracy for two tools applied to the same data and the same poverty line. For example, see Schreiner (2006a), Baulch (2003), and Wodon (1997).

Second, the two tools have about the same targeting accuracy. Leakage to the non-poor is essentially the same for all cut-offs, and although the BISP has slightly better inclusion for some cut-offs, three of the four imperfections in the comparison work in its favor. Thus, this paper concludes that the two tools have approximately equal targeting effectiveness, perhaps an unsurprising result given their similarity and the "flat maximum" phenomenon.

For example, setting a cut-off so as to target the lowest-scoring 25 percent of people would mean that the BISP would successfully target 56.5 percent of people below 100% of the national poverty line while the new scorecard here would target 55.0 percent. This same cut-off would mistakenly target 14 percent of people above the line, regardless of the tool used.

If both tools target equally well, then other criteria are needed to choose between them. The BISP tool has a more (and more complex) indicators, and a few extra minutes can add up across millions of interviews. The predecessor of the new scorecard here (Schreiner, 2006a) was applied to more than 600,000 households in Pakistan before 2009 by the Rural Support Program Network, and it was accepted by users as straightforward, inexpensive, and sufficiently accurate (Waqar, 2008); given the similarity of the tools, the BISP pilot will surely reach similar conclusions.

In practice, Pakistan made its choice based on the World Bank's advice. The network externalities generated by the government's massive application of the BISP scorecard will tend to make it the tool that local, pro-poor organizations would like to use for their own purposes. This means that local programs need to know the BISP tool's points (for targeting) and how to use the tool to estimate groups' poverty rates.[18] To that end, it would promote development in Pakistan if the World Bank would publish its tools' points, document how scores are converted to poverty likelihoods, and report on the accuracy of the resulting estimates of poverty rates.

[18] The World Bank asked that this paper suppress the points in the BISP tool, presumably to reduce the risk that households and enumerators will manipulate scores. Of course, all indicators are associated with poverty in common-sense ways, so suppressing a tool's points does not prevent households and enumerators from knowing how to manipulate data to reduce scores and qualify for BISP transfers. In general, transparency serves the poor, and opacity serves the powerful.

4. Scorecard construction

For the Pakistan scorecard, about 100 potential indicators are prepared in the areas of:

- Family composition (such as household size)
- Education (such as school attendance of children)
- Employment (such as number of household members working in agriculture)
- Housing (such as the number of rooms)
- Ownership of durable goods (such as televisions, refrigerators, and freezers)

Each indicator is first reviewed with the entropy-based "uncertainty coefficient" (Goodman and Kruskal, 1979), a measure of how well the indicator predicts poverty on its own. Figure 5 lists all the candidate indicators, ranked by uncertainty coefficient and with responses for each indicator ordered starting with those most strongly associated with poverty.

The scorecard also aims to measure *changes* in poverty through time. This means that, when selecting indicators and holding other considerations constant, preference is given to more sensitive indicators. For example, ownership of a television 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 (Figure 2). Indicator selection uses both judgment and statistics. The first step is to use Logit to build one scorecard for each candidate indicator. Each scorecard's accuracy is taken as "c", a measure of ability to rank by poverty status (SAS Institute Inc., 2004).

One of these one-indicator scorecards is then selected based on several factors (Schreiner *et al.*, 2004; Zeller, 2004), including 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 status, variety among indicators, and verifiability.

A series of two-indicator scorecards are then built, each based on the one-indicator scorecard selected from the first step, with a second candidate indicator added. The best two-indicator scorecard is then selected, again based on "c" and judgment. These steps are repeated until the scorecard has 10 indicators, at which point additional review takes place. The selection of indicators is also informed by feedback on practical considerations from pro-poor organizations in Pakistan.

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 the Logit analogue to the familiar R^2-based stepwise with least-squares regression. It differs from naïve stepwise in that the criteria for selecting indicators include not only statistical accuracy but also judgment and non-statistical factors. The use of non-statistical criteria can improve robustness through time and helps ensure that indicators are simple and make sense to users.

The single scorecard here applies to all of Pakistan. Evidence from Mexico and India (Schreiner, 2006b and 2006c), Sri Lanka (Narayan and Yoshida, 2005), and

Jamaica (Grosh and Baker, 1995) suggests that segmenting scorecards by urban/rural does not improve targeting accuracy much, although—as pointed out by Tarozzi and Deaton (2007)—such segmentation may improve the accuracy of estimated poverty rates. For Pakistan, segmenting the scorecard by urban and rural does not improve targeting accuracy (results available on request).

5. Practical guidelines for scorecard use

The main challenge of scorecard design is not to squeeze out the last drops of accuracy but rather to improve the chances that scoring is actually used (Schreiner, 2005). When scoring projects fail, the reason is not usually technical inaccuracy but rather the failure of an organization to decide to do what is needed to integrate scoring in its processes and to learn to use it properly (Schreiner, 2002). After all, most reasonable scorecards predict tolerably well, thanks to the empirical phenomenon known as the "flat max" (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 adopt it and use it properly. Of course, accuracy is important, but so are 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 make a lot of "extra" work and if the whole process generally seems to make sense.

To this end, the scorecard here fits on a single page. The construction process, indicators, and points are simple and transparent. "Extra" work is minimized; non-specialists can compute scores by hand in the field because the scorecard has:

- Only 10 indicators
- Only categorical indicators
- Simple weights (non-negative integers, and no arithmetic beyond addition)

A field worker using the paper scorecard would:

- Record participant identifiers
- Read each question from the scorecard
- Circle each response and its points
- Write the points in the far-right column
- Add up the points to get the total score
- Implement targeting policy (if any)
- Deliver the paper scorecard to a central office for data entry and filing

5.1 Quality control

Of course, field workers must be trained. High-quality outputs require high-quality inputs. If organizations or field workers gather their own data and if they believe that they have an incentive to exaggerate poverty rates (for example, if 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).[19] IRIS Center (2007a) and Toohig (2008) are useful nuts-and-bolts guides for planning, budgeting, training field workers and supervisors, logistics, sampling, interviewing, piloting, recording data, and controlling quality.

In particular, while collecting scorecard indicators is relatively easier than most alternatives, it is still absolutely difficult. Training and explicit definitions of the

[19] If an organization does not want field workers to know the points associated with indicators, then they can use the version of Figure 1 without points and apply the points later in a spreadsheet or database at the central office.

scorecard's indicators and responses is essential.[20] One study in Nigeria finds distressingly low inter-rater and test-retest correlations for indicators as seemingly simple and obvious as whether the household owns an automobile (Onwujekwe, Hanson, and Fox-Rushby, 2006). At the same time, Grosh and Baker (1995) find that gross underreporting of assets does not affect targeting. For the first stage of targeting in Mexico's *Oportunidades* conditional cash-transfer program, Martinelli and Parker (2007) find that "underreporting [of asset ownership] is widespread but not overwhelming, except for a few goods . . . [and] overreporting is common for a few goods, which implies that self-reporting may lead to the exclusion of deserving households" (pp. 24–25). Still, as is the practice of *Oportunidades* itself in the second stage of its targeting process, most false self-reports can be corrected by field agents who verify responses with a home visit, and this is the suggested procedure here.

[20] Appendix A gives help for interpreting the indicators in Pakistan's scorecard.

5.2 Implementation and sampling

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

- Who will do the scoring
- How scores will be recorded
- What participants will be scored
- How many participants will be scored
- How frequently participants will be scored
- 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

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

- Employees of the organization
- Third-party contractors

Responses, scores, and poverty likelihoods can be recorded:

- On paper in the field and then filed at an office
- On paper in the field and then keyed into a database or spreadsheet at an office
- On portable electronic devices in the field and then downloaded to a database

The subjects to be scored can be:

- All participants (or all new participants)
- A representative sample of all participants (or of all new participants)
- All participants (or all new participants) in a representative sample of branches
- A representative sample of all participants (or of all new participants) in a representative sample of branches

If not determined by other factors, the number of participants to be scored can be derived from sample-size formulas (presented later) for a desired confidence level and a desired confidence interval.

Frequency of application can be:

- At in-take of new clients only (precluding measuring change in poverty rates)
- As a once-off project for current participants (precluding measuring change)
- Once a year or at some other fixed time interval (allowing measuring change)
- Each time a field worker visits a participant at home (allowing measuring change)

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

- With different sets of participants, each of which is representative of a population
- With the same set of participants

An example set of implementation and design choices is illustrated by BRAC and ASA, two microfinance organizations in Bangladesh (each with more than 7 million participants) who are applying the Simple Poverty Scorecard® (Schreiner, 2013). Their design is that loan officers in a random sample of branches score all their clients each time they visit a homestead (about once a year) as part of their standard due diligence prior to loan disbursement. Responses are recorded on paper in the field before being sent to a central office to be entered into a database. The sampling plans of ASA and BRAC cover 50,000–100,000 participants each, which is far more than would be required to inform most relevant decisions at a typical pro-poor organization.

6. Estimates of household poverty likelihoods

The sum of scorecard points for a household is called the *score*. For Pakistan, 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 below a line, the scores themselves have only relative units. For example, doubling the score increases the likelihood of being above a line, but it does not double the likelihood.

To get absolute units, scores must be 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 with the 2005/6 PSLM, scores of 10–14 have a poverty likelihood of 84.1 percent, and scores of 20–24 have a poverty likelihood of 57.6 percent (Figure 6).

Of course, the poverty likelihood associated with a score varies by poverty line. For example, scores of 20–24 are associated with a poverty likelihood of 57.6 percent for 100% of the national line but 18.9 percent for 75% of the national line.[21]

[21] Starting with Figure 6, figures have up to 27 versions, one for each of the nine poverty lines for the 2005/6 scorecard applied to the 2005/6 validation sample, one for each of the nine poverty lines for the 2005/6 scorecard applied to the 2004/5 PSLM, and one for each of the nine poverty lines for the 2005/6 scorecard applied to the 2000/1 PIHS. To keep them straight, they are grouped by poverty line and by the data used for validation. Single tables that pertain to all poverty lines and/or years are placed with the tables for the 100% of the national line and the 2005/6 validation sample.

6.1 Calibrating scores with poverty likelihoods

A given score is non-parametrically 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 are below a given poverty line.

For the example of 100% of the national line (Figure 7), there are 1,210 (normalized) households in the calibration sub-sample with a score of 10–14, of whom 1,018 (normalized) are below the poverty line. The estimated poverty likelihood associated with a score of 10–14 is then 84.1 percent, as 1,018 ÷ 1,210 = 84.1 percent.

To illustrate further with 100% of the national line and a score of 20–24, there are 4,424 (normalized) households in the calibration sample, of whom 2,550 (normalized) are below the line (Figure 7). Thus, the poverty likelihood for this score is 2,550 ÷ 4,424 = 57.6 percent.

The same method is used to calibrate scores with estimated poverty likelihoods for the other eight poverty lines.

Figure 8 shows, for all scores, the likelihood that consumption falls in a range demarcated by two adjacent poverty lines. There is one version of Figure 8 for the five national lines because they are defined in terms of adult equivalents, and there is a second version of Figure 8 for the three international lines because they are defined in terms of people.[22] For the example of the national lines, the daily consumption per adult

[22] The USAID "extreme" line is not in Figure 8 because it is almost the same as the USD1.25/day 2005 PPP line.

equivalent of someone living in a household with a score of 20–24 falls in the following ranges with probability:

- 2.6 percent below 50% of the national line
- 16.3 percent between 50% and 75% of national lines
- 38.8 percent between 75% and 100% of national lines
- 17.9 percent between 100% and 125% of national lines
- 23.7 percent between 125% and 200% of national line
- 0.8 percent above 200% of the national line

Even though the scorecard is constructed partly based on judgment, this calibration process produces poverty likelihoods that are objective, that is, derived from survey data on consumption and quantitative poverty lines. The poverty likelihoods would be objective even if indicators and/or points were selected without any data at all. In fact, objective scorecards of proven accuracy are often based only on judgment (Fuller, 2006; Caire, 2004; Schreiner *et al.*, 2004). 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 this depends on using data in score calibration, not on using data (and nothing else) in scorecard construction.

Although the points in Pakistan's scorecard are transformed coefficients from a Logit regression, scores are not converted to poverty likelihoods via the Logit formula of $2.718281828^{\text{score}} \times (1+ 2.718281828^{\text{score}})^{-1}$. 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. In the field, converting scores to poverty likelihoods in this way requires no arithmetic at all, just a look-up table. This non-parametric calibration can also improve accuracy, especially with large calibration samples.

6.2 Accuracy of estimates of households' poverty likelihoods

As long as the relationship between indicators and poverty does not change and as long as the scorecard is applied to households who are representative of the same population from which the scorecard was constructed, 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 poverty likelihood. The scorecard also produces unbiased estimates of poverty rates at a point in time, as well as unbiased estimates of changes in poverty rates between two points in time.[23]

Of course, the relationship between indicators and poverty does change with time and also—as Tarozzi and Deaton (2007) point out—across sub-groups in Pakistan's population, so the scorecard will generally be biased when applied after the June 2006 end date of fieldwork for the 2005/6 PSLM (as it must be in practice) or when applied with non-nationally representative groups (as it probably would be by local, pro-poor organizations).

[23] This follows because these estimates of groups' poverty rates are linear functions of the unbiased estimates of households' poverty likelihoods.

How accurate are estimates of households' poverty likelihoods when the assumption of representativeness holds? To check, the scorecard is applied to 1,000 bootstrap samples of size $n = 16{,}384$ from the 2005/6 validation sub-sample. Bootstrapping entails (Efron and Tibshirani, 1993):

- Score each household in the validation sample
- Draw a new bootstrap sample *with replacement* from the validation sample
- For each score, compute the true poverty likelihood in the bootstrap sample, that is, the share of households with the score who have consumption below a poverty line
- For each score, record the difference between the estimated poverty likelihood (Figure 6) and the true poverty likelihood in the bootstrap sample
- Repeat the previous three steps 1,000 times
- For each score, report the average difference between estimated and true poverty likelihoods across the 1,000 bootstrap samples
- For each score, report the two-sided intervals containing the central 900, 950, or 990 differences between estimated and true poverty likelihoods

For each score range and for $n = 16{,}384$, Figure 9 shows the average difference between estimated and true poverty likelihoods as well as confidence intervals for the differences.

For 100% of the national line in the 2005/6 validation sample, the average poverty likelihood across bootstrap samples for scores of 20–24 is too low by 1.0 percentage points (Figure 9). For scores of 15–19, the estimate is too high by 0.4 percentage points.[24]

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

The 90-percent confidence interval for the differences for scores of 20–24 is ±3.5 percentage points (Figure 9). This means that in 900 of 1,000 bootstraps, the difference between the estimate and the true value is between –4.5 and 2.5 percentage points (because –1.0 – 3.5 = –4.5, and –1.0 + 3.5 = 2.5). In 950 of 1,000 bootstraps (95 percent), the difference is –1.0 ±4.2 percentage points, and in 990 of 1,000 bootstraps (99 percent), the difference is –1.0 ±5.6 percentage points.

For all scores below 79, Figure 9 shows differences—some of them large—between estimated poverty likelihoods and true values. This is because the validation sub-sample is a single sample that—thanks to sampling variation—differs in distribution from the construction/calibration sub-samples and from Pakistan's population. In contrast, when the 2005/6 scorecard is applied to the 2004/5 PSLM and the 2000/1 PIHS, differences are probably due mostly to changes in the relationships between indicators and poverty over time. For targeting, however, what matters is less the differences across all score ranges and more the differences in score ranges just above and below the targeting cut-off. This mitigates the effects of bias and sampling variation on targeting (Friedman, 1997). Section 9 below looks at targeting accuracy in detail.

Of course, if estimates of groups' poverty rates are to be usefully accurate, then errors for individual households must largely cancel each other out. This is generally the case, especially for the 2005/6 validation sub-sample, as discussed in the next section.

Another possible source of bias is overfitting. By construction, the scorecard here is unbiased, but it may still be *overfit* when applied after the June 2006 end of field work for the 2005/6 PSLM. That is, the scorecard may fit data from the 2005/6 PSLM 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 2005/6 PSLM. Or the scorecard may be overfit in the sense that it becomes biased as the relationships between indicators and poverty change through time (for example, due to war or economic crisis). Finally, the scorecard could also be overfit when it is applied to samples from non-nationally representative sub-groups.

Overfitting can be mitigated by simplifying the scorecard and by not relying only on data but rather also considering experience, judgment, and theory. Of course, the scorecard here does this. Bootstrapping scorecard construction—which is not done here—can also mitigate overfitting by reducing (but not eliminating) dependence on a single sampling instance. Combining scorecards can also help, at the cost of complexity.

In any case, most errors in individual households' likelihoods cancel out in the estimates of groups' poverty rates (see later sections). Furthermore, much of the differences between scorecard estimates and true values may come from non-scorecard sources such as changes in the relationship between indicators and poverty, sampling variation, changes in poverty lines, inconsistencies in data quality across time, and inconsistencies/imperfections in cost-of-living adjustments across time and geography. These factors can be addressed only by improving data quantity and quality (which is beyond the scope of the scorecard), by updating data, or by reducing overfitting (which likely has limited returns, given the scorecard's parsimony).

7. Estimates of a group's poverty rate at a point in time

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

To illustrate, suppose a program samples three households on Jan. 1, 2009 and that they have scores of 20, 30, and 40, corresponding to poverty likelihoods of 57.6, 39.5, and 17.4 percent (100% of the national line, Figure 6). The group's estimated poverty rate is the households' average poverty likelihood of $(57.6 + 39.5 + 17.4) \div 3 =$ 38.2 percent.[25]

7.1 Accuracy of estimated poverty rates at a point in time

How accurate is this estimate? For a range of sample sizes, Figure 11 reports average differences between estimated and true poverty rates as well as precision (confidence intervals for the differences) for the Pakistan scorecard applied to 1,000 bootstrap samples from a validation sample.

Summarizing Figure 11 across poverty lines and years for $n = 16{,}384$, Figure 10 shows that the differences between the estimated poverty rate and the true rate for the 2005/6 scorecard applied to the 2005/6 validation sample are always 2.0 percentage

[25] The group's poverty rate is *not* the poverty likelihood associated with the average score. Here, the average score is $(20 + 30 + 40) \div 3 = 30$, and the poverty likelihood associated with the average score is 39.5 percent. This is not the 38.2 percent found as the average of the three poverty likelihoods associated with each of the three scores.

points or less and that the average difference across the nine poverty lines for the 2005/6 validation sample is 0.9 percentage points.

In terms of precision, the 90-percent confidence interval for a group's estimated poverty rate at a point in time for any of the three validation samples and any poverty line with n = 16,384 is ±0.6 percentage points or less (Figure 10). This means that in 900 of 1,000 bootstraps of this size, the absolute difference between the estimate and the average estimate is 0.6 percentage points or less.

In the specific case of 100% of the national line and the 2005/6 validation sample, 90 percent of all samples of n = 16,384 produce estimates that differ from the true value in the range of +1.1 + 0.5 = +1.6 to +1.1 – 0.5 = +0.6 percentage points. This is because +1.1 is the average difference, and ±0.5 is its 90-percent confidence interval. The average difference is +1.1 because the average scorecard estimate is too high by 1.1 percentage points; the scorecard tends to estimate a poverty rate of 20.8 percent for the 2005/6 validation sample, but the true value is 19.7 percent (Figure 2).

The differences between estimates and true values are larger for the 2005/6 scorecard applied to the 2004/5 PSLM and the 2000/1 PIHS (Figure 10). Part of these differences is due to sampling variation across survey rounds and in the division of the 2005/6 PSLM into three sub-samples, as well as small design differences across the

three survey rounds. Mostly, however, the differences are probably due to changes in the relationships between indicators and poverty over time.[26]

For the Pakistan scorecard based on the 2005/6 PSLM applied to the 2004/5 PSLM and the 2000/1 PIHS with $n = 16{,}384$, the differences at a point in time range from –6.1 to +6.0 percentage points, and the average absolute difference across lines and years is 2.9 percentage points. The 90-percent confidence intervals are ±0.6 percentage points or less. Accuracy in future years will depend on the extent to which they resemble 2005/6.

7.2 Standard-error formula for estimates of poverty rates at a point in time

How precise are the point-in-time estimates? Because they are averages, the estimates have a Normal distribution and can be characterized by their average difference vis-à-vis true values, along with the standard error of the average difference.

[26] Similar exercises in other countries and less tumultuous periods show smaller differences between estimates and true values.

To derive a formula for the standard errors of estimated poverty rates at a point in time for indirect measurement via poverty-assessment tools (Schreiner, 2008a), note that the textbook formula (Cochran, 1977) that relates confidence intervals with standard errors in the case of direct measurement of poverty rates is $c = +/- z \cdot \sigma$, where:

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

z is from the Normal distribution and is $\begin{cases} 1.64 \text{ for confidence levels of 90 percent} \\ 1.96 \text{ for confidence levels of 95 percent} \\ 2.58 \text{ for confidence levels of 99 percent} \end{cases}$,

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

p is the proportion of households below the poverty line in the sample, and

n is the sample size.

For example, given a sample n = 16,384, 90-percent confidence (z = 1.64), and a poverty rate p of 19.7 percent (the true rate in the 2005/6 validation sample for 100% of the national line in Figure 2), the confidence interval c is

$$+/- z \cdot \sqrt{\frac{p \cdot (1-p)}{n}} = +/- 1.64 \cdot \sqrt{\frac{0.197 \cdot (1-0.197)}{16{,}384}} = \pm 0.510 \text{ percentage points.}$$

The scorecard, however, does not measure poverty directly, so this formula is not immediately applicable. To derive a formula for the Pakistan scorecard, consider Figure 11, which reports empirical confidence intervals c for the differences for the scorecard applied to 1,000 bootstrap samples of various sample sizes from a validation sample.

For $n = 16{,}384$, 100% of the national line, and the 2005/6 validation sub-sample, the 90-percent confidence interval is ±0.470 percentage points.[27] Thus, the ratio of confidence intervals with the scorecard versus direct measurement is 0.470 ÷ 0.510 = 0.92.

Now consider the same case, but with $n = 8{,}192$. The confidence interval under direct measurement is $+/-1.64 \cdot \sqrt{\frac{0.197 \cdot (1-0.197)}{8{,}192}} = \pm 0.721$ percentage points. The empirical confidence interval with the Pakistan scorecard for this case (Figure 11) is ±0.660 percentage points. Thus for $n = 8{,}192$, the ratio is 0.660 ÷ 0.721 = 0.92.

This ratio of 0.92 obtains for both $n = 8{,}182$ and $n = 16{,}384$. Indeed, across all sample sizes of 256 or more in Figure 11, the average ratio turns out to be 0.90, implying that confidence intervals for indirect estimates of poverty rates via the Pakistan scorecard and this poverty line are nine-tenths as wide as those for direct estimates. This 0.90 appears in Figure 10 as the "α factor" because if $\alpha = 0.90$, then the formula relating confidence intervals c and standard errors σ for the Pakistan scorecard is $c = +/- z \cdot \alpha \cdot \sigma$. The standard error σ for point-in-time estimates of poverty rates via scoring is then $\alpha \cdot \sqrt{\frac{p \cdot (1-p)}{n}}$.

In general, α could 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. This occurs in more than

[27] Due to rounding, Figure 11 displays 0.5, not 0.470.

one-third of the cases in Figure 10. In general, α is close to 1.00, except for the two lowest poverty lines.

The formula relating confidence intervals to standard errors for scoring can be rearranged to give a formula for determining sample size n before measurement.[28] If $\hat{p}$ is the expected poverty rate before measurement, then the formula for n based on the desired confidence level that corresponds to z and the desired confidence interval $\pm c$ under scoring is $n = \left(\frac{\alpha \cdot z}{c}\right)^2 \cdot \hat{p} \cdot (1 - \hat{p})$.

To illustrate how to use this, suppose $c = 0.0356$ and $z = 1.64$ (90-percent confidence), and $\hat{p} = 0.198$ (the average poverty rate for 100% of the national line in the 2005/6 construction and calibration sub-samples, Figure 2). Then the formula gives $n = \left(\frac{0.90 \cdot 1.64}{0.0356}\right)^2 \cdot 0.198 \cdot (1 - 0.198) = 273$, close to the sample size of 256 observed for these parameters in Figure 11.

Of course, the α factors in Figure 10 are specific to Pakistan, its poverty lines, its poverty rates, and this scorecard. The method for deriving the formulas, however, is valid for any poverty-assessment tool following the approach in this paper.

[28] IRIS Center (2007a and 2007b) says that a sample size of $n = 300$ is sufficient for reporting estimated poverty rates to USAID. If a scorecard is as precise as direct measurement, if the expected (before measurement) poverty rate is 50 percent, and if the confidence level is 90 percent, then $n = 300$ implies a confidence interval of ±2.2 percentage points. In fact, USAID has not specified confidence levels or intervals. Furthermore, the expected poverty rate may not be 50 percent, and the scorecard could be more or less precise than direct measurement.

In practice after the end of field work in June 2006 for the 2005/6 PSLM, an organization would select a poverty line (say, 100% of the national line), select a desired confidence level (say, 90 percent, or $z = 1.64$), select a desired confidence interval (say, ± 2.0 percentage points, or $c = 0.02$), make an assumption about $\hat{p}$ (perhaps based on a previous measurement such as the 19.8 percent average for 100% of the national line in the 2005/6 PSLM in Figure 2), look up α (here, 0.90), assume that the scorecard will still work in the future and/or for non-nationally representative sub-groups,[29] and then compute the required sample size. In this illustration,

$$n = \left(\frac{0.90 \cdot 1.64}{0.02} \right)^2 \cdot 0.198 \cdot (1 - 0.198) = 865.$$

[29] This paper reports accuracy for the scorecard applied to the 2005/6 validation sample and to the 2004/5 PSLM and the 2000/1 PIHS, but it cannot test accuracy for later years or for other groups. Performance will deteriorate with time to the extent that the relationship between indicators and poverty changes.

8. Estimates of changes in group poverty rates over time

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

8.1 Warning: Change is not impact

Scoring can estimate change. Of course, change could be for the better or for the worse, and in any case, scoring does not indicate what caused change. This point is often forgotten, confused, or ignored, so it bears repeating: scoring simply estimates change, and it does not, in and of itself, indicate the reason for the change. In particular, estimating the impact of program 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, scoring can help estimate program impact only if there is some way to know what would have happened in the absence of the program. And that information must come from somewhere beyond scoring.

8.2 Calculating estimated changes in poverty rates over time

Consider the illustration begun in the previous section. On Jan. 1, 2009, a program samples three households who score 20, 30, and 40 and so have poverty likelihoods of 57.6, 39.5, and 17.4 percent (100% of the national line, Figure 6). The

group's baseline estimated poverty rate is the households' average poverty likelihood of (57.6 + 39.5 + 17.4) ÷ 3 = 38.2 percent.

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

- Score a new, independent sample, measuring change by cohort across samples
- Score the same sample at follow-up as at baseline

By way of illustration, suppose that a year later on Jan. 1, 2010, the program samples three additional households who are in the same cohort as the three households originally sampled (or suppose that the program scores the same three original households a second time) and finds that their scores are now 25, 35, and 45 (poverty likelihoods of 47.1, 29.8, and 16.9 percent, 100% of the national line, Figure 6). Their average poverty likelihood at follow-up is (47.1 + 29.8 + 16.9) ÷ 3 = 31.3 percent, an improvement of 38.2 – 31.3 = 6.9 percentage points.[30]

This suggests that about one in 14 participants crossed the poverty line in 2009. (This is a net figure; some people start above the line and end below it, and vice versa.) Among those who started below the line, more than one in five (6.9 ÷ 38.2 = 18.1 percent) ended up above the line. Of course, scoring does not reveal the reasons for this change.

[30] Of course, such a huge reduction in poverty in one year is unlikely, but this is just an example to show how scoring can be used to estimate change.

8.3 Estimated changes in poverty rates in Pakistan

Given the Pakistan scorecard built from the construction and calibration samples from the 2005/6 PSLM, an estimate of the change in the poverty rate over time is the difference between the estimated poverty rate in the 2005/6 validation sample and the estimated poverty rate in the 2004/5 PSLM or the 2000/1 PIHS.

In Figure 12 (summarizing Figure 13 across years and poverty lines), the difference between this estimate and the true value for 100% of the national line between 2005/6 and 2004/5 is –2.5 percentage points. The true change was –3.6 percentage points (Figure 2), while the scorecard estimates a change of –5.1 percentage points. Across all nine lines for 2005/6 and 2004/5, the average absolute difference is 2.4 percentage points. In percentage terms, the estimated change was about 130 percent larger (in absolute value) than the true change. In terms of precision, the 90-percent confidence interval is ±0.9 percentage points or less (Figure 12). Results for the 2000/1 validation sample are similar.

Because the scorecard estimate is unbiased, these differences are due to sampling variation, changes in poverty lines and/or data collection, and—especially—changes over time in the relationship between indicators and poverty. The magnitude of the differences here is exceeds that of other tests (Schreiner, 2009b, 2009c, and 2008b; Chen and Schreiner, 2009; Mathiassen, 2008), suggesting that they are due more to Pakistan-

specific factors than to the poverty-scoring approach.[31] The accuracy of the Pakistan scorecard here will depend on the extent to which the periods in which it is applied resemble 2005/6.

8.4 Accuracy for estimated change in two independent 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 c with the standard error σ of a scorecard's estimate of the change in poverty rates over time:

$$c = +/- z \cdot \sigma = +/- z \cdot \alpha \cdot \sqrt{\frac{2 \cdot p \cdot (1-p)}{n}} .$$

z, c, and p are defined as above, n is the sample size at both baseline and follow-up,[32] and α is the average (across a range of bootstrapped sample sizes) of the ratio of the observed confidence intervals from a scorecard and the theoretical confidence intervals from the textbook formula. All the α factors for Pakistan exceed 1.00 (Figure 12), so in this case scoring is less precise than direct measurement.

[31] The only other country with similar inaccuracy for estimates of change is Mexico (Schreiner, 2009a), and that is for a period that includes a descent into economic crisis.
[32] This means that, for a given precision and with direct measurement, estimating the change in a poverty rate over time requires four times as many measurements (not twice as many) as does estimating a poverty rate at a point in time.

The formula for standard errors can be rearranged to give a formula for sample sizes before indirect measurement via a scorecard, where $\hat{p}$ is based on previous measurements and is assumed equal at both baseline and follow-up:

$$n = 2 \cdot \left(\frac{\alpha \cdot z}{c} \right)^2 \cdot \hat{p} \cdot (1 - \hat{p}) .$$

To illustrate the use of the formula above to determine sample size for estimating changes in poverty rates across two independent samples from 2005/6 and 2004/5, suppose the desired confidence level is 90 percent ($z = 1.64$), the desired confidence interval is 2 percentage points ($c = 0.02$), the poverty line is 100% of the national line, $\alpha = 1.37$ (from Figure 12), and $\hat{p} = 0.198$ (from Figure 2). Then the baseline sample size is $n = 2 \cdot \left(\frac{1.37 \cdot 1.64}{0.02} \right)^2 \cdot 0.198 \cdot (1 - 0.198) = 4{,}009$, and the follow-up sample is also 4,009.

8.5 Accuracy for estimated change for one sample, scored twice

The general formula relating the confidence interval c to the standard error σ when using scoring to estimate change for a single group of households, all of whom are scored at two points in time, is:[33]

$$c = +/- z \cdot \sigma = +/- z \cdot \alpha \cdot \sqrt{\frac{p_{12} \cdot (1 - p_{12}) + p_{21} \cdot (1 - p_{21}) + 2 \cdot p_{12} \cdot p_{21}}{n}} .$$

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

z, c, and α are defined as before, p_{12} is the share of all sampled households that move from below the poverty line to above it, and p_{21} is the share of all sampled households that move from above the line to below it.

As usual, the formula for σ can be rearranged to give a formula for sample size n before measurement. This requires an estimate (based on information available before measurement) of the expected shares of all households who cross the poverty line $\hat{p}_{12}$ and $\hat{p}_{21}$. Before measurement, it is reasonable to assume that the overall change in the poverty rate will be zero, which implies $\hat{p}_{12} = \hat{p}_{21} = \hat{p}_*$, giving:

$$n = 2 \cdot \left(\frac{\alpha \cdot z}{c} \right)^2 \cdot \hat{p}_* .$$

$\hat{p}_*$ could be anything between zero and one, so more information is needed before applying this formula. Suppose that the observed relationship between $\hat{p}_*$, the number of years y between baseline and follow-up, and $p_{\text{baseline}} \cdot (1 - p_{\text{baseline}})$ is—as in Peru (Schreiner, 2009b)—close to:

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

Given this, a sample-size formula for a group of households to whom the Pakistan scorecard is applied twice (once after the end of field work for the 2005/6 PSLM and then again later) is:

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

In Peru (the only other country for which there is a data-based estimate, Schreiner 2009b), the average α across years and poverty lines is about 1.3.

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 ($c = 0.02$), the poverty line is 100% of the national line, and the sample will be scored first in 2009 and then again in 2012 ($y = 3$). The before-baseline poverty rate is 23.3 percent ($p_{2004/5} = 0.233$, Figure 2), and suppose $\alpha = 1.3$. Then the baseline sample size is $n = 2 \cdot \left(\frac{1.3 \cdot 1.64}{0.02} \right)^2 \cdot \left\{ -0.02 + 0.016 \cdot 3 + 0.47 \cdot \left[0.233 \cdot (1 - 0.233) \right] \right\} = 2{,}546$. The same group of 2,546 households is scored at follow-up as well.

9. Targeting

When a program uses the scorecard for targeting, households with scores at or below a cut-off are labeled *targeted* and treated—for program purposes—as if they are below a given poverty line. Households with scores above a cut-off are labeled *non-targeted* and treated—for program purposes—as if they are above a given poverty line.

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 depends on 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 applied to an indirect estimate from a scorecard.

As discussed in Section 3, 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 scorecard 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*).

Figure 14 depicts these four possible targeting outcomes. Targeting accuracy varies by cut-off; a higher cut-off has better inclusion (but greater leakage), while a lower cut-off has better exclusion (but higher undercoverage).

A program 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).

Figure 15 shows the distribution of households by targeting outcome. For an example cut-off of 24 or less and the 2005/6 scorecard applied to the 2005/6 validation sample, outcomes for 100% of the national line are:

- Inclusion: 5.5 percent are below the line and correctly targeted
- Undercoverage: 14.2 percent are below the line and mistakenly not targeted
- Leakage: 2.9 percent are above the line and mistakenly targeted
- Exclusion: 77.4 percent are above the line and correctly not targeted

Increasing the cut-off to 29 or less improves inclusion and undercoverage but worsens leakage and exclusion:

- Inclusion: 8.7 percent are below the line and correctly targeted
- Undercoverage: 11.0 percent are below the line and mistakenly not targeted
- Leakage: 7.0 percent are above the line and mistakenly targeted
- Exclusion: 73.3 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 Figure 15 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. Any program that uses targeting—with or without scoring—should thoughtfully consider

how it values successful inclusion or 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 "Total Accuracy" (IRIS Center, 2005; Grootaert and Braithwaite, 1998). With "Total Accuracy", total net benefit is the number of households correctly included or correctly excluded:

Total Accuracy =	1	x	Households correctly included	–
	0	x	Households mistakenly undercovered	–
	0	x	Households mistakenly leaked	+
	1	x	Households correctly excluded.	

Figure 15 shows "Total Accuracy" for all cut-offs for Pakistan's scorecard. For 100% of the national line in the 2005/6 validation sample, total net benefit is greatest (82.9) for a cut-off of 24 or less, with almost five in six Pakistani households correctly classified.

"Total Accuracy" weighs successful inclusion of households below the line the same as successful exclusion of households above the line. If a program valued inclusion more (say, twice as much) than exclusion, it could reflect this by setting the benefit for inclusion to 2 and the benefit for exclusion to 1. Then the chosen cut-off would maximize (2 x Households correctly included) + (1 x Households correctly excluded).[34]

[34] Figure 15 also reports "BPAC", the Balanced Poverty Accuracy Criteria adopted by USAID as its criterion for certifying poverty-assessment tools. IRIS Center (2005) says that BPAC considers accuracy both in terms of the estimated poverty rate and in terms of targeting inclusion. After normalizing by the number of people below the poverty line, the formula is:

As an alternative to assigning benefits and costs to targeting outcomes and then choosing a cut-off to maximize total net benefit, a program could set a cut-off to achieve a desired poverty rate among targeted households. The third column of Figure 16 ("% targeted who are poor") shows the expected poverty rate among Pakistani households who score at or below a given cut-off. For the example of 100% of the national line and the 2005/6 validation sample, targeting households who score 24 or less would target 8.4 percent of all households (second column) and produce a poverty rate among those targeted of 65.2 percent (third column).

Figure 16 also reports two other measures of targeting accuracy. The first is a version of inclusion ("% of poor who are targeted"). For the example of 100% of the national line and the 2005/6 validation sample with a cut-off of 24 or less, 27.9 percent of all poor households are covered.

The final targeting measure in Figure 16 is the number of successfully targeted poor households for each non-poor household mistakenly targeted (right-most column). For 100% of the national line, the 2005/6 validation sample, and a cut-off of 24 or less, covering 1.9 poor households means leaking to 1 non-poor household.

BPAC = (Inclusion + |Undercoverage – Leakage|) x [100 ÷ (Inclusion+Undercoverage)].

10. Conclusion

Pro-poor programs in Pakistan can use the Simple Poverty Scorecard® poverty-assessment tool 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 between two points in time

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

The scorecard is built with a sub-sample of data from the 2005/6 PSLM, tested on a different sub-sample from the 2005/6 PSLM and on the 2004/5 PSLM and the 2000/1 PIHS, and calibrated to nine poverty lines (100% of national, 50% of national, 75% of national, 125% of national, 200% of national, USAID "extreme", $1.25/day 2005 PPP, $2.50/day 2005 PPP, and $3.75/day 2005 PPP).

Accuracy is reported for estimates of households' poverty likelihoods, groups' poverty rates at a point in time, and changes in groups' poverty rates over time. Of course, the scorecard's estimates of changes in poverty rates are not the same as estimates of program impact. Targeting accuracy is also reported, as are formula for standard errors.

When the scorecard is applied to the 2005/6 validation sample with $n = 16{,}384$, the difference between estimates and true poverty rates at a point in time is always less than 2.0 percentage points and averages—across the nine poverty lines—about 0.9

percentage points. With 90-percent confidence, the precision of these differences is ±0.6 percentage points or less. In this case, the scorecard is about as precise than direct measurement.

When used to measure change across independent samples of $n = 16{,}384$ between the 2005/6 validation sample and the 2004/5 PSLM or the 2000/1 PIHS, the average absolute difference between estimates and true changes across poverty lines and years is large (about 3.3 percentage points), with a 90-percent confidence interval of ±0.9 percentage points or less. Accuracy in the future will depend on how closely the situation in Pakistan resembles that of 2005/6.

For targeting, programs can use the results reported here to select a cut-off that fits their values and mission.

Although the statistical technique is innovative, and although technical accuracy is important, the design of the scorecard here focuses on transparency and ease-of-use. After all, a perfectly accurate scorecard is worthless if programs feel so daunted by its complexity or its cost that they do not even try to use it. For this reason, the scorecard is kept simple, using ten indicators that are inexpensive to collect and that are straightforward to verify. 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 related to poverty likelihoods via simple look-up tables, and targeting cut-offs are likewise simple to apply. The design attempts to facilitate adoption by helping

managers understand and trust scoring and by allowing non-specialists to generate scores quickly in the field.

In summary, the Simple Poverty Scorecard® is a practical, objective way for pro-poor programs in Pakistan 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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Appendix A: Interpretation of Scorecard Indicators

The quantitative link between the new scorecard here and the data from Pakistan's Federal Bureau of Statistics in the 2005/6 PSLM, the 2004/5 PSLM, and the 2000/1 PIHS requires that the scorecard indicators be asked and interpreted in the same way as they were in those surveys.

For example, consider the indicator "Does the household own a television?" A possible issue is whether to count a small television, or a black-and-white television, or a broken television. The answer is that the interpretation should follow that used in the national consumption surveys.

For some issues (see below), the *Manual of Instructions* for the 2005/6 PSLM tells how indicators are to be interpreted. In such cases, interpretation should follow the *Manual*. For other issues, the *Manual* is silent. While it is possible that these issues were addressed in interviewer training, what that training entailed is unknown. In most such cases, the training probably did not address the issue at all.

When there is no official guide to interpretation, the interpretation should be left to the field agent and the respondent, and neither should be given any guidance. This mimics the apparent practice in the national surveys. If this is done, then the distribution of interpretations in the application of the poverty scorecard can be expected to match the distribution of interpretations in the national survey. In the example of television ownership, the *Manual* provides no specific guidance. Thus, a pro-poor organization should not tell field agents to count broken televisions, nor should it tell field agents not to count them; it should give no guidance at all, except to direct the field agent and respondent to apply their own interpretations.

The following information comes from the *Manual of Instructions* for the 2005/6 PSLM by Pakistan's Federal Bureau of Statistics.

1. In what province does the household live?

The *Manual* does not discuss this indicator.

2. How many household members are 13 years old or younger?

Members of the household are those "who usually live and eat together and consider the living quarter/space occupied by them as their usual place of residence" (p. 3). They have "the same common cooking arrangements and have a common head of household" (p. 5). The *usual place of residence* "shall normally imply a specific living quarter/space held by the person to which he/she is free to return" (p. 6).

The *Manual* has about three pages of further clarifications and examples, but the guidelines above cover almost all cases.

3. How many children ages 5 to 13 attend school?

Those currently attending school include "all those persons who are currently enrolled to take examinations 'regular or private' and also those students who are not currently enrolled but are awaiting examination results" (p. 16).

4. How many household members work in elementary occupations (not senior officials, managers, professionals, technicians or associated professionals, clerks, salespeople, service or shop workers, skilled workers in agriculture or fishery, craft or trade workers, or plant/machinery operators)?

This corresponds to occupation codes 80 to 89 using the two-digit Pakistan Standard Classification of Occupations. Specifically, *elementary occupations* are "sales and services elementary occupations (street vendors and related workers, shoe-cleaning and other street services, elementary occupations, domestic and related helpers, cleaners and launderers, building caretakers, window and related cleaners, messengers, porters, doorkeepers and related workers, garbage collectors and related workers), agricultural, fishery, and related laborers, and laborers in mining, construction, manufacturing, and transport (mining and construction laborers, manufacturing laborers, transport laborers, and freight handlers)" (pp. 91–92).

5. What is the highest educational level completed by the female head/spouse?

The *Manual* provides no guidelines for this indicator.

6. What is the main source of drinking water for the household?

Relevant notes from the *Manual* (p. 44) include:

- "In some areas, generally in rural areas, the ground water is not good for drinking. Households use a hand pump or motorized pumped water for uses other than drinking, but special arrangements are made for drinking water that may be from the nearby canal etc. Such situations may be probed and coded accordingly."
- *Piped water* means "a delivery system where the water is delivered through a network of pipes and the water is treated before it is supplied. In urban areas generally, water comes in to a house through pipes and is stored in tanks, built in the house. Then the water, for the use of the household, is lifted into small tanks, built at the top of the house. Such system should be recorded as 'piped supply'. In some areas, at some places, water is taken from springs directly through pipes, without any septic tanks for storage and cleaning. The source in such situations should be recorded as 'spring' ['other'] and not 'piped water'."
- A *hand pump* is a "pump operated manually to draw water from a bored hole. Sometimes a hand pump and motor are operated at the same hole. The source should be noted as 'motorized pump', not 'hand pump'."
- A *motorized pump/tube well* "uses either a heavy or small motor to draw water from a bored hole. Any type of motor (diesel, petrol, electric) may be used."
- A *covered well* is "a dug well without a covering".
- A *closed well* is "a dug well with a covering".
- "An open well or a closed well, having a hand pump or motorized pump, will be categorized as an 'covered well' or a 'closed well'."
- "Sometimes in rural areas, houses are built on agricultural lands and then the canal water becomes available in the house. The source of drinking water is canal [other]."

7. What type of toilet is used by your household?

Relevant notes from the *Manual* (p. 45) include:

- *Flush* means "having a flush tank or using a bucket etc. to use water to flush away the waste."
- *Flush connected to public sewerage* means "water is used to flush away the waste, which drains into the public sewerage system."
- *Flush connected to pit* means "water is used to flush away the waste, which is disposed and accumulated in a septic tank/soak pit located under or near the toilet. A septic tank is a concrete structure which can be cleaned and used permanently. A soak pit is a *katcha* structure which is closed once it is filled up. It is designed so that the waste disappears into the ground."
- *Flushed connected to open drain* means "the flushed water is channeled through a drain, which is uncovered."
- *Dry raised latrine* [other] means "there is no flush; instead, a *khuddi* is used, and he waste is taken away by a sweeper/*jamadar*."
- *Dry pit latrine* [other] means "there is no flush; instead, a hole is dug in the ground, connected to a pit in which the waste matter is accumulated. The hole is closed once the pit is filled up."
- Record 'none' "if there is no toilet facility in the household. A toilet, which is used by the household and is situated in the yard, is considered as a toilet of the household."

8. Does the household own a refrigerator or freezer?

The *Manual* provides no guidelines for this indicator.

9. Does the household own a television?

The *Manual* provides no guidelines for this indicator.

10. Does the household own a motorcycle, scooter, car, or other vehicle?

The *Manual* provides no guidelines for this indicator.

Appendix B: BISP Poverty Scorecard (no points)

Indicator	Value
1. How many people in the household are under the age of 18 or over the age of 65?	A. None, one, or two B. Three or four C. Five or six D. Seven or more
2. What is the highest educational level of the head of household (completed)?	A. Never attended school B. Less than Class 1 or up to Class 5 C. Class 6 to Class 10 D. Class 11 or higher
3. How many children in the household between 5 and 16 years old are currently attending school?	A. No children in this age range B. All C. Some D. None
4. How many rooms per person does the household owns?	A. More than zero and up to 0.2 B. More than 0.2 and up to 0.3 C. More than 0.3 and up to 0.4 D. 0.4 or more
5. What kind of toilet is used by the household?	A. Flush connected to public sewerage, to a pit, or to an open drain B. Dry raised latrine or dry pit latrine C. No toilet
6. Does the household own at least one refrigerator, freezer, or washing machine?	A. Yes B. No
7. Does the household own at least one air conditioner, air cooler, geyser, or heater?	A. Yes B. No
8. Does the household own at least one cooking stove, cooking range, or microwave oven?	A. Yes B. No
9. Does the household own the following engine-driven vehicles?	A. At least one car/tractor and at least one motorcycle/scooter B. At least one car/tractor but no motorcycle/scooter C. No car/tractor but at least one motorcycle/scooter D. No car/tractor nor motorcycle/scooter
10. Does the household own at least one TV?	A. Yes B. No
11. Does the household own the following livestock?	A. At least one buffalo/bullock and at least one cow/goat/sheep B. At least one buffalo/bullock but no cows/goats/sheep C. No buffalos/bullocks but at least one cow/goat/sheep D. No buffalos/bullocks nor cows/goats/sheep
12. How much agricultural land does the household own?	A. None B. Some, up to 12.5 Ha C. More than 12.5 Ha

Source: World Bank (2009). Points suppressed at the request of the World Bank.

Comparison of targeting accuracy, BISP scorecard versus the new scorecard here, using the 2005/6 PSLM validation sub-sample and 100% of the national poverty line

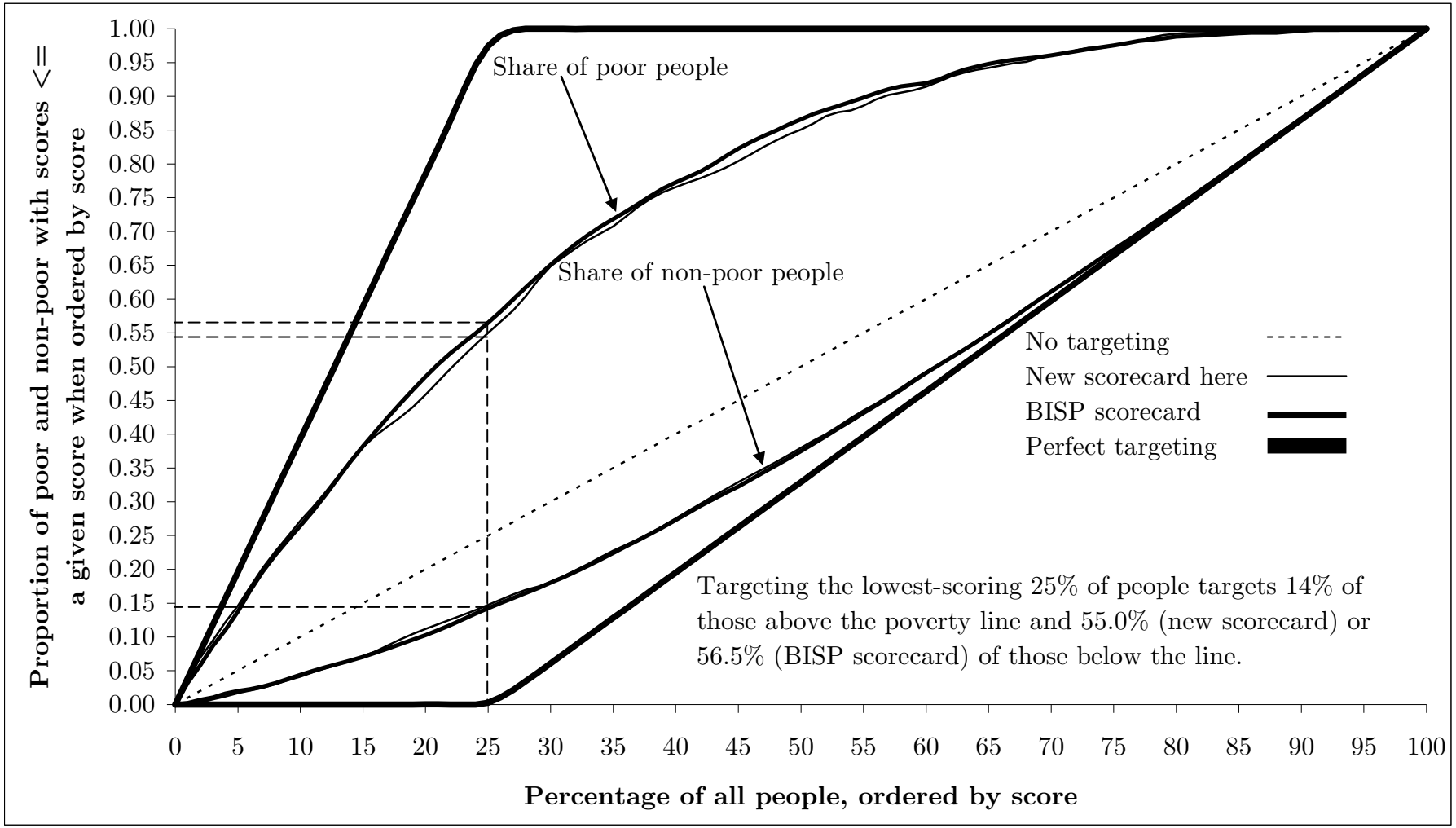

Figure 2: Sample sizes and household poverty rates by sub-sample, survey round and poverty line

			% with expenditure below a poverty line								
			National line (per adult equivalent)					USAID	Intl. 2005 PPP (per person)		
Sub-sample	**Round**	**Households**	**50%**	**75%**	**100%**	**125%**	**200%**	**'Extreme'**	**$1.25/day**	**$2.50/day**	**$3.75/day**
All Pakistan	2005/6	15,439	0.5	5.3	19.8	37.3	73.3	9.8	17.7	69.2	87.4
	2004/5	14,693	1.2	8.2	23.3	39.9	71.0	12.1	20.9	67.3	84.9
	2000/1	15,799	1.3	10.1	29.1	49.6	81.9	13.8	26.4	78.8	92.0
Construction											
Selecting indicators and weights	2005/6	5,205	0.5	5.2	19.7	37.3	73.8	9.8	17.9	69.2	88.0
Calibration											
Associating scores with likelihoods	2005/6	5,095	0.6	5.5	19.9	37.1	73.8	9.8	17.6	69.7	87.7
Validation											
Measuring accuracy	2005/6	5,139	0.4	5.2	19.7	37.4	72.3	9.7	17.5	68.7	86.5
Change in poverty rate (percentage points)											
From 2005/6 construction/calibration to 2005/6 validation			+0.2	+0.2	+0.1	–0.2	+1.5	+0.1	+0.2	+0.7	+1.3
From 2005/6 validation to 2004/5 for all Pakistan			–0.9	–3.0	–3.6	–2.5	+1.3	–2.4	–3.3	+1.4	+1.7
From 2005/6 validation to 2000/1 for all Pakistan			–0.9	–4.9	–9.4	–12.2	–9.6	–4.1	–8.9	–10.1	–5.5

Source: 2005/6 and 2004/5 PSLM and 2000/1 PIHS. The USAID "extreme" line is per person.

Figure 3: Poverty lines and poverty rates by survey round and by urban/rural/all, for Pakistan as a whole, household level

Round	Urban rural, or all	Line or rate	Poverty line (Rs per person or per adult equivalent per day) and poverty rate (%)								
			National line (per adult equivalent)					USAID	Intl. 2005 PPP (per person)		
			50%	75%	100%	125%	200%	'Extreme'	$1.25/day	$2.50/day	$3.75/day
2000/1	Urban	Line	12.68	19.02	25.36	31.70	50.72	20.09	21.96	43.92	65.88
		Rate	0.6	5.9	18.1	35.0	69.4	8.8	16.7	65.8	83.3
	Rural	Line	11.58	17.38	23.17	28.96	46.34	18.52	20.06	40.13	60.19
		Rate	1.6	11.8	33.6	55.5	86.9	15.9	30.4	84.1	95.6
	All	Line	11.90	17.85	23.80	29.75	47.60	18.97	20.61	41.22	61.83
		Rate	1.3	10.1	29.1	49.6	81.9	13.8	26.4	78.8	92.0
2004/5	Urban	Line	15.18	22.77	30.36	37.95	60.73	26.45	26.23	52.45	78.68
		Rate	0.4	4.5	14.2	26.8	57.2	7.5	12.3	53.4	73.9
	Rural	Line	14.06	21.09	28.12	35.16	56.25	23.90	24.29	48.59	72.88
		Rate	1.7	9.9	27.7	46.2	77.7	14.3	25.0	74.0	90.1
	All	Line	14.42	21.64	28.85	36.06	57.70	24.72	24.92	49.84	74.76
		Rate	1.2	8.2	23.3	39.9	71.0	12.1	20.9	67.3	84.9
2005/6	Urban	Line	16.94	25.40	33.87	42.34	67.75	28.71	29.26	58.52	87.78
		Rate	0.3	2.7	12.9	26.9	60.7	6.5	11.2	56.3	78.0
	Rural	Line	14.83	22.24	29.66	37.07	59.32	25.06	25.62	51.24	76.86
		Rate	0.6	6.6	23.4	42.7	80.0	11.5	21.1	76.0	92.4
	All	Line	15.56	23.34	31.12	38.90	62.23	26.32	26.88	53.76	80.64
		Rate	0.5	5.3	19.8	37.3	73.3	9.8	17.7	69.2	87.4

Source: 2004/5 and 2005/6 PSLM, and 2000/1 PIHS. The surveys omit Azad Jammu and Kashmir, FATA, and the Northern Areas.
USAID "extreme" line is per person. "All" lines and rates are weighted averages of urban and rural.

Figure 3 (cont.): Poverty lines and poverty rates by survey round and by urban/rural/all, for Balochistan, household level

Round	Urban rural, or all	Line or rate	Poverty line (Rs per person or per adult equivalent per day) and poverty rate (%)								
			National line (per adult equivalent)					USAID	Intl. 2005 PPP (per person)		
			50%	75%	100%	125%	200%	'Extreme'	$1.25/day	$2.50/day	$3.75/day
2000/1	Urban	Line	13.31	19.97	26.63	33.28	53.26	22.52	23.06	46.12	69.17
		Rate	0.4	5.2	18.2	35.5	73.5	8.7	16.7	68.1	87.7
	Rural	Line	12.88	19.32	25.76	32.20	51.52	21.75	22.31	44.62	66.93
		Rate	0.2	6.6	27.8	51.6	87.1	13.2	25.0	84.8	96.4
	All	Line	12.94	19.41	25.88	32.35	51.76	21.85	22.41	44.82	67.23
		Rate	0.2	6.4	26.5	49.4	85.3	12.6	23.9	82.6	95.3
2004/5	Urban	Line	17.89	26.83	35.77	44.72	71.54	28.59	30.90	61.80	92.70
		Rate	0.8	6.7	21.0	40.0	73.1	9.4	19.1	71.3	86.4
	Rural	Line	17.18	25.76	34.35	42.94	68.70	28.31	29.67	59.34	89.02
		Rate	1.8	12.3	37.1	58.9	88.1	18.6	33.6	86.6	94.7
	All	Line	17.31	25.97	34.62	43.28	69.25	28.36	29.91	59.81	89.72
		Rate	1.6	11.2	34.0	55.3	85.3	16.9	30.8	83.6	93.1
2005/6	Urban	Line	17.29	25.93	34.57	43.22	69.14	27.80	29.86	59.73	89.59
		Rate	1.2	10.9	30.4	50.8	83.3	15.2	27.8	80.9	93.5
	Rural	Line	17.53	26.29	35.05	43.82	70.11	25.87	30.28	60.56	90.84
		Rate	4.0	28.5	54.7	73.7	95.9	26.0	51.1	93.6	98.9
	All	Line	17.48	26.21	34.95	43.69	69.90	26.28	30.19	60.38	90.57
		Rate	3.4	24.7	49.6	68.8	93.2	23.7	46.1	90.9	97.7

Source: 2004/5 and 2005/6 PSLM, and 2000/1 PIHS. The surveys omit Azad Jammu and Kashmir, FATA, and the Northern Areas.
USAID "extreme" line is per person. "All" lines and rates are weighted averages of urban and rural.

Figure 3 (cont.): Poverty lines and poverty rates by survey round and by urban/rural/all, for Northwest Frontier Province, household level

Round	Urban rural, or all	Line or rate	Poverty line (Rs per person or per adult equivalent per day) and poverty rate (%)								
			National line (per adult equivalent)					USAID	Intl. 2005 PPP (per person)		
			50%	75%	100%	125%	200%	'Extreme'	$1.25/day	$2.50/day	$3.75/day
2000/1	Urban	Line	12.03	18.05	24.07	30.09	48.14	20.85	20.84	41.69	62.53
		Rate	0.2	6.4	24.0	43.1	75.9	12.1	21.5	72.0	90.5
	Rural	Line	11.90	17.85	23.80	29.75	47.60	20.13	20.61	41.22	61.83
		Rate	0.5	9.9	36.1	60.2	89.6	17.0	33.2	87.8	96.1
	All	Line	11.92	17.88	23.84	29.80	47.68	20.24	20.64	41.29	61.93
		Rate	0.5	9.4	34.3	57.6	87.6	16.3	31.5	85.4	95.3
2004/5	Urban	Line	15.03	22.54	30.06	37.57	60.12	25.99	25.96	51.93	77.89
		Rate	0.3	6.0	22.6	38.3	69.1	11.2	20.4	65.3	82.5
	Rural	Line	14.94	22.41	29.88	37.35	59.76	25.44	25.81	51.62	77.44
		Rate	1.5	12.5	37.6	57.1	83.9	18.7	33.7	81.4	92.9
	All	Line	14.96	22.43	29.91	37.39	59.82	25.53	25.84	51.67	77.51
		Rate	1.3	11.4	35.1	54.1	81.4	17.5	31.5	78.7	91.2
2005/6	Urban	Line	16.01	24.02	32.03	40.03	64.05	27.06	27.66	55.33	82.99
		Rate	0.0	5.7	20.7	37.2	69.3	10.1	19.1	65.5	83.2
	Rural	Line	15.68	23.53	31.37	39.21	62.74	26.88	27.10	54.19	81.29
		Rate	0.2	6.2	27.5	50.0	82.7	13.3	24.1	79.5	92.9
	All	Line	15.74	23.61	31.48	39.35	62.95	26.91	27.19	54.38	81.57
		Rate	0.1	6.1	26.4	47.9	80.5	12.7	23.3	77.2	91.3

Source: 2004/5 and 2005/6 PSLM, and 2000/1 PIHS. The surveys omit Azad Jammu and Kashmir, FATA, and the Northern Areas.
USAID "extreme" line is per person. "All" lines and rates are weighted averages of urban and rural.

Figure 3 (cont.): Poverty lines and poverty rates by survey round and by urban/rural/all, for Sindh, household level

Round	Urban rural, or all	Line or rate	Poverty line (Rs per person or per adult equivalent per day) and poverty rate (%)							
			National line (per adult equivalent)					USAID	Intl. 2005 PPP (per person)		
			50%	75%	100%	125%	200%	'Extreme'	$1.25/day	$2.50/day	$3.75/day
2000/1	Urban	Line	13.40	20.10	26.79	33.49	53.59	21.93	23.20	46.40	69.61
		Rate	0.1	3.7	15.1	30.5	67.3	7.4	13.7	62.5	79.6
	Rural	Line	11.76	17.64	23.51	29.39	47.03	18.37	20.36	40.72	61.09
		Rate	1.3	17.5	41.6	64.4	91.3	19.0	38.8	88.7	97.8
	All	Line	12.44	18.66	24.88	31.10	49.76	19.85	21.54	43.09	64.63
		Rate	0.8	11.8	30.6	50.3	81.3	14.2	28.4	77.8	90.2
2004/5	Urban	Line	15.83	23.75	31.67	39.58	63.33	28.49	27.35	54.71	82.06
		Rate	0.3	2.9	10.9	22.2	53.8	6.0	9.4	49.7	69.2
	Rural	Line	14.01	21.01	28.02	35.02	56.04	24.34	24.20	48.40	72.60
		Rate	1.6	8.2	24.8	45.5	79.4	12.7	22.3	76.3	90.5
	All	Line	14.81	22.21	29.61	37.02	59.23	26.16	25.58	51.16	76.74
		Rate	1.0	5.9	18.7	35.3	68.2	9.8	16.7	64.6	81.1
2005/6	Urban	Line	17.38	26.07	34.76	43.45	69.52	28.71	30.03	60.06	90.08
		Rate	0.0	1.3	10.3	24.3	59.3	4.8	8.8	54.6	75.8
	Rural	Line	15.07	22.60	30.13	37.67	60.26	25.17	26.03	52.06	78.09
		Rate	0.8	9.3	33.6	55.9	90.0	15.5	30.4	87.2	97.6
	All	Line	16.30	24.44	32.59	40.74	65.18	27.05	28.15	56.31	84.46
		Rate	0.4	5.1	21.2	39.1	73.7	9.8	18.9	69.9	86.0

Source: 2004/5 and 2005/6 PSLM, and 2000/1 PIHS. The surveys omit Azad Jammu and Kashmir, FATA, and the Northern Areas.
USAID "extreme" line is per person. "All" lines and rates are weighted averages of urban and rural.

Figure 3 (cont.): Poverty lines and poverty rates by survey round and by urban/rural/all, for Punjab and Islamabad, household level

Round	Urban rural, or all	Line or rate	Poverty line (Rs per person or per adult equivalent per day) and poverty rate (%)								
			National line (per adult equivalent)					USAID	Intl. 2005 PPP (per person)		
			50%	75%	100%	125%	200%	'Extreme'	$1.25/day	$2.50/day	$3.75/day
2000/1	Urban	Line	12.30	18.45	24.60	30.75	49.21	18.80	21.31	42.61	63.92
		Rate	1.0	7.2	19.3	36.7	69.7	9.2	17.9	66.8	84.3
	Rural	Line	11.26	16.89	22.53	28.16	45.05	17.69	19.51	39.01	58.52
		Rate	2.1	11.2	31.2	52.0	84.8	14.9	27.7	81.6	94.6
	All	Line	11.56	17.34	23.12	28.90	46.23	18.01	20.02	40.04	60.05
		Rate	1.8	10.0	27.8	47.6	80.5	13.3	24.9	77.4	91.7
2004/5	Urban	Line	14.68	22.02	29.36	36.70	58.73	25.16	25.36	50.73	76.09
		Rate	0.4	5.2	15.0	27.8	57.2	8.0	12.9	53.6	75.2
	Rural	Line	13.58	20.37	27.16	33.95	54.32	22.95	23.46	46.92	70.39
		Rate	1.7	9.7	25.3	42.5	74.5	13.4	22.9	70.1	88.9
	All	Line	13.93	20.89	27.86	34.82	55.72	23.65	24.06	48.13	72.19
		Rate	1.3	8.3	22.0	37.8	69.0	11.7	19.7	64.9	84.5
2005/6	Urban	Line	16.72	25.07	33.43	41.79	66.86	28.94	28.88	57.76	86.64
		Rate	0.4	3.0	12.9	26.4	59.5	6.9	11.2	55.3	78.1
	Rural	Line	14.31	21.46	28.61	35.76	57.22	24.48	24.72	49.43	74.14
		Rate	0.4	4.1	16.7	34.4	75.0	8.7	15.1	70.4	90.2
	All	Line	15.07	22.61	30.15	37.68	60.29	25.90	26.04	52.08	78.12
		Rate	0.4	3.7	15.5	31.9	70.1	8.1	13.8	65.6	86.4

Source: 2004/5 and 2005/6 PSLM, and 2000/1 PIHS. The surveys omit Azad Jammu and Kashmir, FATA, and the Northern Areas.
USAID "extreme" line is per person. "All" lines and rates are weighted averages of urban and rural.

Figure 3 (cont.): Poverty lines and poverty rates by survey round and by urban/rural/all, for Pakistan as a whole, person level

Round	Urban rural, or all	Line or rate	Poverty line (Rs per person or per adult equivalent per day) and poverty rate (%)							
			National line (per adult equivalent)					USAID	Intl. 2005 PPP (per person)	
			50%	75%	100%	125%	200%	'Extreme'	$1.25/day	$2.50/day	$3.75/day
2000/1	Urban	Line	12.66	18.99	25.32	31.65	50.64	20.14	21.93	43.85	65.78
		Rate	0.9	8.1	23.6	42.9	77.1	11.9	21.7	74.3	88.6
	Rural	Line	11.59	17.38	23.17	28.97	46.35	18.58	20.07	40.13	60.20
		Rate	2.1	15.1	40.0	62.9	90.5	20.0	37.1	88.8	97.2
	All	Line	11.89	17.84	23.78	29.73	47.57	19.02	20.60	41.19	61.79
		Rate	1.7	13.1	35.4	57.2	86.7	17.7	32.7	84.7	94.8
2004/5	Urban	Line	15.16	22.73	30.31	37.89	60.62	26.45	26.18	52.36	78.54
		Rate	0.6	6.6	18.6	33.0	64.4	10.7	16.5	61.4	80.1
	Rural	Line	14.11	21.17	28.22	35.28	56.44	23.95	24.38	48.76	73.13
		Rate	2.6	13.0	33.2	53.0	82.2	18.3	30.6	79.5	92.7
	All	Line	14.44	21.67	28.89	36.11	57.77	24.74	24.95	49.90	74.86
		Rate	2.0	11.0	28.6	46.6	76.6	15.9	26.1	73.7	88.7
2005/6	Urban	Line	16.85	25.28	33.70	42.13	67.40	28.69	29.11	58.22	87.33
		Rate	0.3	4.0	17.9	34.9	69.2	9.1	15.7	65.6	84.5
	Rural	Line	14.85	22.28	29.71	37.14	59.42	25.13	25.66	51.32	76.99
		Rate	0.9	8.8	29.0	49.4	84.6	15.0	26.7	81.8	94.9
	All	Line	15.53	23.29	31.05	38.81	62.10	26.33	26.82	53.64	80.47
		Rate	0.7	7.2	25.3	44.5	79.4	13.0	23.0	76.3	91.4

Source: 2004/5 and 2005/6 PSLM, and 2000/1 PIHS. The surveys omit Azad Jammu and Kashmir, FATA, and the Northern Areas.
USAID "extreme" line is per person. "All" lines and rates are weighted averages of urban and rural.

Figure 3 (cont.): Poverty lines and poverty rates by survey round and by urban/rural/all, for Balochistan, person level

Round	Urban rural, or all	Line or rate	Poverty line (Rs per person or per adult equivalent per day) and poverty rate (%)								
			National line (per adult equivalent)					USAID	Intl. 2005 PPP (per person)		
			50%	75%	100%	125%	200%	'Extreme'	$1.25/day	$2.50/day	$3.75/day
2000/1	Urban	Line	13.29	19.94	26.58	33.23	53.16	22.45	23.02	46.04	69.06
		Rate	0.6	7.7	24.5	43.8	81.4	12.1	22.5	77.1	92.9
	Rural	Line	12.87	19.30	25.73	32.17	51.46	21.71	22.28	44.57	66.85
		Rate	0.4	8.9	33.2	57.9	91.5	16.5	30.2	90.0	98.2
	All	Line	12.93	19.39	25.85	32.32	51.71	21.82	22.39	44.78	67.16
		Rate	0.4	8.7	31.9	55.9	90.0	15.8	29.1	88.2	97.5
2004/5	Urban	Line	17.88	26.81	35.75	44.69	71.50	28.59	30.88	61.76	92.64
		Rate	1.7	10.1	27.6	50.3	80.7	13.9	25.3	79.5	92.3
	Rural	Line	17.16	25.73	34.31	42.89	68.62	28.31	29.64	59.28	88.91
		Rate	2.9	16.2	43.3	65.4	91.5	23.5	40.0	90.6	96.5
	All	Line	17.30	25.95	34.60	43.25	69.21	28.37	29.89	59.78	89.67
		Rate	2.6	14.9	40.1	62.4	89.3	21.6	37.1	88.4	95.6
2005/6	Urban	Line	17.30	25.96	34.61	43.26	69.22	27.80	29.90	59.79	89.69
		Rate	1.7	14.0	37.9	60.2	89.0	19.1	35.1	87.4	97.1
	Rural	Line	17.52	26.28	35.04	43.80	70.07	25.87	30.27	60.53	90.80
		Rate	5.0	32.0	60.1	78.3	97.0	30.0	57.1	96.0	99.2
	All	Line	17.47	26.20	34.94	43.67	69.87	26.33	30.18	60.36	90.53
		Rate	4.2	27.7	54.9	74.0	95.1	27.4	51.9	93.9	98.7

Source: 2004/5 and 2005/6 PSLM, and 2000/1 PIHS. The surveys omit Azad Jammu and Kashmir, FATA, and the Northern Areas.
USAID "extreme" line is per person. "All" lines and rates are weighted averages of urban and rural.

Figure 3 (cont.): Poverty lines and poverty rates by survey round and by urban/rural/all, for Northwest Frontier Province, person level

Round	Urban rural, or all	Line or rate	Poverty line (Rs per person or per adult equivalent per day) and poverty rate (%)								
			National line (per adult equivalent)					USAID	Intl. 2005 PPP (per person)		
			50%	75%	100%	125%	200%	'Extreme'	$1.25/day	$2.50/day	$3.75/day
2000/1	Urban	Line	12.03	18.04	24.06	30.07	48.11	20.85	20.83	41.66	62.49
		Rate	0.2	7.9	29.5	49.7	81.8	14.9	26.1	78.3	93.8
	Rural	Line	11.91	17.86	23.81	29.76	47.62	20.13	20.62	41.24	61.86
		Rate	0.7	12.2	41.9	66.4	91.8	21.0	39.3	90.8	97.0
	All	Line	11.92	17.88	23.85	29.81	47.69	20.24	20.65	41.30	61.95
		Rate	0.6	11.6	40.1	63.9	90.3	20.1	37.4	89.0	96.5
2004/5	Urban	Line	15.11	22.66	30.22	37.77	60.44	25.99	26.10	52.21	78.31
		Rate	0.8	8.1	28.0	46.3	76.2	14.4	25.6	73.9	87.3
	Rural	Line	15.01	22.52	30.03	37.53	60.06	25.44	25.94	51.88	77.81
		Rate	2.6	16.0	43.0	62.7	87.1	23.0	39.4	85.4	94.8
	All	Line	15.03	22.54	30.06	37.57	60.12	25.53	25.96	51.93	77.89
		Rate	2.3	14.7	40.6	60.0	85.3	21.6	37.1	83.5	93.6
2005/6	Urban	Line	15.98	23.97	31.96	39.95	63.92	27.06	27.61	55.21	82.82
		Rate	0.0	7.9	25.5	46.3	75.2	13.1	23.5	72.4	87.7
	Rural	Line	15.60	23.40	31.21	39.01	62.41	26.88	26.96	53.91	80.87
		Rate	0.3	7.9	32.7	55.9	86.2	16.6	29.1	84.2	94.3
	All	Line	15.66	23.49	31.32	39.16	62.65	26.91	27.06	54.12	81.17
		Rate	0.2	7.9	31.6	54.4	84.5	16.1	28.2	82.3	93.3

Source: 2004/5 and 2005/6 PSLM, and 2000/1 PIHS. The surveys omit Azad Jammu and Kashmir, FATA, and the Northern Areas.
USAID "extreme" line is per person. "All" lines and rates are weighted averages of urban and rural.

Figure 3 (cont.): Poverty lines and poverty rates by survey round and by urban/rural/all, for Sindh, person level

Round	Urban rural, or all	Line or rate	Poverty line (Rs per person or per adult equivalent per day) and poverty rate (%)								
			National line (per adult equivalent)					USAID	Intl. 2005 PPP (per person)		
			50%	75%	100%	125%	200%	'Extreme'	$1.25/day	$2.50/day	$3.75/day
2000/1	Urban	Line	13.35	20.03	26.71	33.39	53.42	21.93	23.13	46.26	69.39
		Rate	0.2	5.8	21.4	40.3	76.9	10.8	19.5	73.1	86.5
	Rural	Line	11.75	17.62	23.50	29.37	46.99	18.37	20.35	40.69	61.04
		Rate	2.2	22.7	49.4	72.4	94.6	24.8	46.8	93.2	98.8
	All	Line	12.37	18.56	24.75	30.94	49.50	19.76	21.43	42.86	64.29
		Rate	1.4	16.1	38.5	59.9	87.7	19.3	36.2	85.4	94.0
2004/5	Urban	Line	15.80	23.70	31.59	39.49	63.19	28.49	27.29	54.58	81.87
		Rate	0.4	4.6	15.3	29.0	61.7	9.1	13.5	58.1	75.7
	Rural	Line	14.04	21.06	28.08	35.09	56.15	24.34	24.25	48.50	72.75
		Rate	2.6	11.1	31.0	53.5	84.3	17.3	28.4	82.4	93.3
	All	Line	14.79	22.18	29.58	36.97	59.15	26.11	25.55	51.10	76.64
		Rate	1.7	8.3	24.3	43.1	74.7	13.8	22.0	72.1	85.8
2005/6	Urban	Line	17.21	25.82	34.43	43.04	68.86	28.71	29.74	59.48	89.22
		Rate	0.1	2.5	15.9	33.7	69.8	8.0	13.7	65.8	83.8
	Rural	Line	15.04	22.56	30.08	37.60	60.15	25.17	25.98	51.96	77.94
		Rate	1.2	12.9	40.7	62.8	93.1	20.4	37.6	91.4	98.5
	All	Line	16.11	24.17	32.23	40.29	64.46	26.92	27.84	55.68	83.52
		Rate	0.7	7.7	28.5	48.4	81.6	14.3	25.8	78.8	91.3

Source: 2004/5 and 2005/6 PSLM, and 2000/1 PIHS. The surveys omit Azad Jammu and Kashmir, FATA, and the Northern Areas.
USAID "extreme" line is per person. "All" lines and rates are weighted averages of urban and rural.

Figure 3 (cont.): Poverty lines and poverty rates by survey round and by urban/rural/all, for Punjab and Islamabad, person level

Round	Urban rural, or all	Line or rate	Poverty line (Rs per person or per adult equivalent per day) and poverty rate (%)								
			National line (per adult equivalent)					USAID	Intl. 2005 PPP (per person)		
			50%	75%	100%	125%	200%	'Extreme'	$1.25/day	$2.50/day	$3.75/day
2000/1	Urban	Line	12.27	18.41	24.55	30.68	49.09	18.80	21.25	42.51	63.76
		Rate	1.4	9.5	24.1	43.7	76.4	12.2	22.5	74.3	89.0
	Rural	Line	11.22	16.83	22.44	28.06	44.89	17.69	19.44	38.87	58.31
		Rate	2.7	14.0	36.9	59.0	88.4	18.4	33.7	86.2	96.4
	All	Line	11.53	17.29	23.05	28.81	46.10	18.01	19.96	39.92	59.88
		Rate	2.3	12.7	33.2	54.6	84.9	16.6	30.5	82.8	94.3
2004/5	Urban	Line	14.63	21.95	29.27	36.59	58.54	25.16	25.28	50.56	75.85
		Rate	0.7	7.4	18.9	32.8	63.8	11.1	16.8	60.9	81.1
	Rural	Line	13.59	20.38	27.18	33.97	54.35	22.95	23.47	46.95	70.42
		Rate	2.6	12.5	30.2	48.7	79.2	16.8	27.9	75.6	91.5
	All	Line	13.92	20.88	27.84	34.80	55.68	23.65	24.05	48.09	72.14
		Rate	2.0	10.9	26.6	43.7	74.3	15.0	24.4	70.9	88.2
2005/6	Urban	Line	16.68	25.02	33.36	41.71	66.73	28.94	28.82	57.64	86.46
		Rate	0.5	3.8	16.9	32.7	66.7	8.7	14.9	63.1	83.7
	Rural	Line	14.29	21.43	28.57	35.72	57.15	24.48	24.68	49.37	74.05
		Rate	0.5	5.5	20.9	40.0	80.1	11.1	19.2	76.4	93.5
	All	Line	15.06	22.59	30.11	37.64	60.23	25.92	26.01	52.03	78.04
		Rate	0.5	5.0	19.6	37.7	75.8	10.4	17.8	72.1	90.3

Source: 2004/5 and 2005/6 PSLM, and 2000/1 PIHS. The surveys omit Azad Jammu and Kashmir, FATA, and the Northern Areas.
USAID "extreme" line is per person. "All" lines and rates are weighted averages of urban and rural.

Figure 4: Caloric guidelines by age and sex, and adult equivalences used in Pakistan's national poverty line

Sex/age	Calories/day	Equivalence factor
Children		
<1	1,010	0.4298
1-4	1,304	0.5549
5-9	1,768	0.7523
Males		
10-14	2,816	1.1983
15-19	3,087	1.3136
20-39	2,760	1.1745
40-49	2,640	1.1234
50-59	2,460	1.0468
60 or more	2,146	0.9132
Females		
10-14	2,464	1.0485
15-19	2,322	0.9881
20-39	2,080	0.8851
40-49	1,976	0.8409
50-59	1,872	0.7966
60 or more	1,632	0.6945
National average:	2,350	1.0000

Source: World Bank, 2004

Figure 5: Poverty indicators by uncertainty coefficient

Uncertainty coefficient	Indicator (Answers ordered starting with those most strongly indicative of poverty)
1073	How many household members are 12 years old or younger? (Five or more; Four; Three; Two; One; None)
1051	How many household members are 11 years old or younger? (Five or more; Four; Three; Two; One; None)
1042	How many household members are 14 years old or younger? (Six or more; Five; Four; Three; Two; One; None)
1039	How many household members are 13 years old or younger? (Five or more; Four; Three; Two; One; None)
1030	How many household members are 16 years old or younger? (Six or more; Five; Four; Three; Two; One; None)
1027	How many household members are 15 years old or younger? (Six or more; Five; Four; Three; Two; One; None)
1004	How many household members are 18 years old or younger? (Seven or more; Six; Five; Four; Three; Two; One; None)
1001	How many household members are 17 years old or younger? (Six or more; Five; Four; Three; Two; One; None)
991	How many household members are 20 years old or younger? (Seven or more; Six; Five; Four; Three; Two; One; None)
941	How many household members are 25 years old or younger? (Eight or more; Seven; Six; Five; Four; Three; Two; One; None)
926	How many household members are there? (Ten or more; Nine; Eight; Seven; Six; Five; Four; One, two, or three)
890	Does the household own a refrigerator or freezer, or washing machine/dryer? (No, none; Yes, only a refrigerator or freezer, or only a washing machine/dryer; Yes, all)
771	Does the household own a refrigerator or freezer? (No; Yes)
721	Does the household own a refrigerator, freezer, air conditioner, air cooler, heater, geyser (gas or electric), or washing machine/dryer, cooking range, microwave oven, vacuum cleaner, or personal computer? (No; Yes)

Figure 5 (cont.): Poverty indicators by uncertainty coefficient

Uncertainty coefficient	Indicator (Answers ordered starting with those most strongly associated with poverty)
700	Does the household own a refrigerator, freezer, or washing machine/dryer? (No; Yes)
680	What is the highest educational level completed by any family member? (Less than Class 1 or no data; Class 1–4; Class 5–7; Class 8 or 9; Class 10; Class 11 or higher)
674	What is the highest educational level completed by the male head/spouse? (Class 1 or less, or no data; Class 2–5; Class 6–9; Class 10 or more; No male head/spouse)
655	How many household members are 5 years old or younger? (Three or more; Two; One; None)
573	Does the household own a washing machine/dryer? (No; Yes)
557	What is the highest educational level completed by the female head/spouse? (Less than Class 1 or no data; No female head/spouse; Class 1 or higher)
552	What type of toilet is used by your household? (None or other; Flush connected to pit/septic tank or open drain; Flush connected to public sewerage)
546	Can the female head/spouse read and write in any language with understanding? (No; Yes)
538	Can the male head/spouse read and write in any language with understanding? (No; Yes)
497	How many fans for the household own? (None; One; Two; Three; Four or more)
493	Does the household own a motorcycle, scooter, car, or other vehicle? (No; Yes)
486	What was the nature of work (profession/occupation) performed by the male head/spouse? (Elementary occupations; No data or armed forces; Craft and related trades workers; Plant and machine operators and assemblers; Skilled agricultural and fishery workers; Service workers and shop and market sales workers; No male head/spouse, legislators, senior officials, managers, professionals, technicians and associated professionals, or clerks)
457	How many household members work in elementary occupations (not senior officials, managers, professionals, technicians or associated professionals, clerks, salespeople, service or shop workers, skilled workers in agriculture or fishery, craft or trade workers, or plant/machinery operators? (Two or more; One; None)
442	Does the household own a television? (No; Yes)
408	Does your household have an electrical connection? (No; Yes)

Figure 5 (cont.): Poverty indicators by uncertainty coefficient

Uncertainty coefficient	Indicator (Answers ordered starting with those most strongly associated with poverty)
388	How many household members can read and write in any language with understanding? (None; One; Two or more)
368	Does the household own an air conditioner, air cooler, geyser (gas or electric), or heater? (No; Yes)
366	Does the household own a motorcycle, scooter, car, or other vehicle? (No; Yes)
333	Does your household have a gas connection? (No; Yes)
303	What is the employment status of the male head/spouse? (Sharecropper/cultivation on partnership; None, because not working; Non-agricultural daily wage/paid employee; Non-agricultural personal business/self-employed, non-agricultural employer (of any number of persons), or non-agricultural unpaid family worker; Self-cultivator/owner-cultivator, contract cultivator, or agriculture, only livestock; No male head/spouse)
295	Is your house connected with a drainage/sewerage system? (No; Yes)
278	How many children ages 5 to 18 attend school? (Not all; All; No children ages 5 to 18)
273	Does the household own an air conditioner or air cooler? (No; Yes)
271	How many children ages 5 to 16 attend school? (Not all; All; No children ages 5 to 16)
267	How many children ages 5 to 17 attend school? (Not all; All; No children ages 5 to 17)
262	How many children ages 5 to 20 attend school? (Not all; All; No children ages 5 to 20)
260	Does the household own a sewing or knitting machine? (No; Yes)
246	Does the household own a heater or geyser (gas or electric)? (No; Yes)
240	In what province does the household live? (Balochistan; Northwest Frontier Province; Sindh; Punjab or Islamabad)
233	How many children ages 5 to 15 attend school? (Not all; All; No children ages 5 to 15)
233	If any household members work in agriculture, forestry, or fishing, does the household own any buffalo? (Agricultural household without buffalo; Non-agricultural household; Agricultural household with buffalo)
228	How many household members attend a non-government school? (None; One; Two; Three or more)
218	How many rooms does your household occupy, excluding storage rooms, bathrooms, toilets, kitchens, and rooms for business? (One; Two; Three; Four; Five or more)

Figure 5 (cont.): Poverty indicators by uncertainty coefficient

Uncertainty coefficient	Indicator (Answers ordered starting with those most strongly associated with poverty)
211	How many children ages 5 to 14 attend school? (Not all; All; No children ages 5 to 14)
206	Does your household have a telephone connection? (No; Yes)
203	Can the male head/spouse solve simple maths questions (addition and subtraction)? (No; Yes; No male head/spouse)
199	How many children ages 5 to 25 attend school? (Not all; All; No children ages 5 to 25)
196	If any household members work in agriculture, forestry, or fishing, does the household own any cattle, buffalo, or camels? (Agricultural household without cattle, buffalo, or camels; Non-agricultural household; Agricultural household with cattle, buffalo, or camels)
193	How many household members work as senior officials or managers, professionals, technicians or associated professionals, or clerks? (None; One or more)
191	How many household members are non-agricultural daily wage/paid employees? (Two or more; One; None)
175	If any household members work in agriculture, forestry, or fishing, does the household own any farm animals (livestock, sheep, goats, beasts of burden/transport, chickens, or poultry)? (Agricultural household without farm animals; Non-agricultural household; Agricultural household with farm animals)
167	How many children ages 5 to 13 attend school? (Not all; All, or no children ages 5 to 13)
167	How many children ages 5 to 13 attend a government or non-government school? (Not all; All at government schools; All, some or all at non-government schools; No children ages 5 to 13)
153	What is the structure of the household headship? (Female head/spouse only; Male head/spouse only; Both male and females heads/spouses)
149	Does the household own a personal computer? (No; Yes)
140	If any household members work in agriculture, forestry, or fishing, does the household own any cattle, buffalo, camels, horses, asses, or mules? (Agricultural household without cattle, buffalo, camels, horses, asses, or mules; Non-agricultural household; Agricultural household with cattle, buffalo, camels, horses, asses, or mules)

Figure 5 (cont.): Poverty indicators by uncertainty coefficient

Uncertainty coefficient	Indicator (Answers ordered starting with those most strongly associated with poverty)
137	If any household members work in agriculture, forestry, or fishing and if the household owns agricultural land, is most of the agricultural land under irrigation? (Agricultural household without land; Agricultural household with land that is mostly non-irrigated; Non-agricultural household; Agricultural household with land that is mostly irrigated)
136	What is the main source of drinking water for the household? (Others; Hand pump, covered/closed well, motorized pump/tube well, or piped water)
132	How many children ages 5 to 12 attend school? (Not all; All; No children ages 5 to 12)
130	How many household members did any work for pay, profit, or family gain in the past month for at least one hour on any day? (Three or more; Two; One; None)
125	If any household members work in agriculture, forestry, or fishing and if the household uses agricultural land, is any of the agricultural land rented in or sharecropped in? (Agricultural household without use of land; Non-agricultural household; Agricultural household with land, none of which is rented in or sharecropped in; Agricultural household with land, at least some of which is rented in or sharecropped in)
124	What is the marital status of the male head/spouse? (Currently married; Never married, widow or widower, divorced, *Nikkah* solemnised but *Rukhsati* not taken place; No male head/spouse)
122	If any household members work in agriculture, forestry, or fishing, does the household own any agricultural land? (Agricultural household without land; Non-agricultural household; Agricultural household with land)
116	Did the male head/spouse do any work for pay, profit, or family gain in the past month for at least one hour on any day? (No; Yes; No male head/spouse)
114	Does the household own a motorcycle, scooter, car, or other vehicle? (No; Yes)
105	Can the female head/spouse solve simple maths questions (addition and subtraction)? (No; Yes; No female head/spouse)

Figure 5 (cont.): Poverty indicators by uncertainty coefficient

Uncertainty coefficient	Indicator (Answers ordered starting with those most strongly associated with poverty)
100	What was the nature of work (profession/occupation) performed by the female head/spouse? (Craft and related trades workers, plant and machine operators and assemblers, or elementary occupations; No data or armed forces; Service workers and shop and market sales workers, or skilled agricultural and fishery workers; Legislators, senior officials, and managers, professionals, technicians and associated professionals, clerks, or no female head/spouse)
97	Does the household own a car or other vehicle? (No; Yes)
87	Does the household own a still or movie camera? (No; Yes)
83	How many children ages 5 to 11 attend school? (Not all; All; No children ages 5 to 11)
81	What is the marital status of the female head/spouse? (Currently married; No female head/spouse; Never married, widow or widower, divorced, *Nikkah* solemnised but *Rukhsati* not taken place)
80	How many household members can solve simple maths questions (addition and subtraction)? (None; One; Three or more; Two)
79	If any household members work in agriculture, forestry, or fishing and if the household owns agricultural land, does it rent out any land on a cash basis? (Agricultural household without use of land; Non-agricultural household; Agricultural household with land, none of which is rented out; Agricultural household with land, at least some of which is rented out)
77	What is the employment status of the female head/spouse? (Non-agricultural daily wage/paid employee; None, because not working; Non-agricultural personal business/self-employed, non-agricultural employer (of any number of persons), or non-agricultural unpaid family worker; Sharecropper/cultivation on partnership, self-cultivator/owner-cultivator, contract cultivator, or agriculture, only livestock; No female head/spouse)
71	What is your present occupancy status? (Rent free; Owner-occupied (self-hired or not self-hired), on rent, or subsidized rent; No data)
65	If any household members work in agriculture, forestry, or fishing and if the household uses agricultural land, does it rent in any land on a cash basis? (Agricultural household without use of land; Non-agricultural household; Agricultural household with land, none of which is rented in; Agricultural household with land, at least some of which is rented in)

Figure 5 (cont.): Poverty indicators by uncertainty coefficient

Uncertainty coefficient	Indicator (Answers ordered starting with those most strongly associated with poverty)
62	If any household members work in agriculture, forestry, or fishing, how many household members work as sharecroppers/cultivators on partnership or as contract cultivators? (One or more; Non-agricultural household; None)
61	If any household members work in agriculture, forestry, or fishing, does the household own any cattle? (Agricultural household without cattle; Non-agricultural household; Agricultural household with cattle)
60	Does the household own a compact disk player? (No; Yes)
57	How many children ages 5 to 10 attend school? (Not all; All; No children ages 5 to 10)
54	If any household members work in agriculture, forestry, or fishing, does the household own any sheep or goats? (Agricultural household without sheep or goats; Non-agricultural household; Agricultural household with sheep or goats)
45	Did the female head/spouse do any work for pay, profit, or family gain in the past month for at least one hour on any day? (Yes; No; No female head/spouse)
42	If any household members work in agriculture, forestry, or fishing, does the household own any chickens or other poultry? (Agricultural household without chickens or other poultry; Non-agricultural household; Agricultural household with chickens or other poultry)
41	If any household members work in agriculture, forestry, or fishing and if the household uses agricultural land, does it sharecrop in any land? (Agricultural household without use of land; Non-agricultural household; Agricultural household with land, none of which is sharecropped in; Agricultural household with land, at least some of which is sharecropped in)
39	If any household members work in agriculture, forestry, or fishing and if the household owns agricultural land, does it rent out or sharecrop out any land? (Agricultural household without use of land; Non-agricultural household; Agricultural household with land, none of which is rented out nor sharecropped out; Agricultural household with land, at least some of which is rented out or sharecropped out)
37	How many household members work in agriculture, forestry, or fishing? (Four or more; Two or three; None or one)

Figure 5 (cont.): Poverty indicators by uncertainty coefficient

Uncertainty coefficient	Indicator (Answers ordered starting with those most strongly associated with poverty)
36	Does the household own a VCR, VCP, receiver, or decoder? (No; Yes)
33	If any household members work in agriculture, forestry, or fishing, does the household own any cattle, buffalo, camels, horses, asses, or mules? (Agricultural household without cattle, buffalo, camels, horses, asses, or mules; Non-agricultural household; Agricultural household with cattle, buffalo, camels, horses, asses, or mules)
31	How many household members work as self-cultivators/owner-cultivators? (None; One or more)
29	How many children ages 5 to 9 attend school? (Not all; All; No children ages 5 to 9)
24	If any household members work in agriculture, forestry, or fishing and if the household owns agricultural land, does it sharecrop out any land? (Agricultural household without use of land; Non-agricultural household; Agricultural household with land, none of which is sharecropped out; Agricultural household with land, at least some of which is sharecropped out)
14	How many household members have a non-agricultural business/self-employed (with or without employees)? (None; One or more)
14	Does the household own a radio, cassette player, or compact disk player? (No; Yes)
3	What is the dwelling type? (Part of a large unit or part of a compound; Independent house/compound, apartment/flat, other, or no data;)
1	How many household members work as a sales, service or shop worker, a skilled worker in agriculture or fishery, a craft or trade worker, or a plant and machinery operator? (One or more; None)

Source: PSLM 2005/6 and 100% national poverty line.

100% National Poverty Line Tables

2006/5 Scorecard Applied to 2006/5 Validation Sample

(and tables pertaining to all nines poverty lines)

Figure 6 (100% 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	95.1
10–14	84.1
15–19	68.0
20–24	57.6
25–29	47.1
30–34	39.5
35–39	29.8
40–44	17.4
45–49	16.9
50–54	10.7
55–59	7.4
60–64	5.1
65–69	0.7
70–74	0.4
75–79	1.1
80–84	0.0
85–89	0.0
90–94	0.0
95–100	0.0

Figure 7 (100% national line): Derivation of estimated poverty likelihoods associated with scores

Score	Households below poverty line		All households at score		Poverty likelihood (estimated, %)
0–4	135	÷	142	=	95.4
5–9	275	÷	289	=	95.1
10–14	1,018	÷	1,210	=	84.1
15–19	1,639	÷	2,410	=	68.0
20–24	2,519	÷	4,370	=	57.6
25–29	3,422	÷	7,274	=	47.1
30–34	3,053	÷	7,722	=	39.5
35–39	2,966	÷	9,943	=	29.8
40–44	1,769	÷	10,151	=	17.4
45–49	1,684	÷	9,975	=	16.9
50–54	782	÷	7,342	=	10.7
55–59	636	÷	8,622	=	7.4
60–64	407	÷	8,040	=	5.1
65–69	34	÷	5,027	=	0.7
70–74	19	÷	4,479	=	0.4
75–79	52	÷	4,652	=	1.1
80–84	0	÷	4,372	=	0.0
85–89	0	÷	1,516	=	0.0
90–94	0	÷	1,756	=	0.0
95–100	0	÷	709	=	0.0

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

Figure 8: Distribution of household poverty likelihoods across ranges demarcated by national poverty lines in units of consumption per day per adult equivalent

	Likelihood of having expenditure in range demarcated by poverty lines per day per adult equivalent					
Score	<50% Natl. <PKR15.56	=>50% Natl. and <75% Natl. =>PKR15.56 and <PKR23.34	=>75% Natl. and <100% Natl. =>PKR23.34 and <PKR31.12	=>100% Natl. and <125% Natl. =>PKR31.12 and <PKR38.90	=>125% Natl. and <200% Natl. =>PKR38.90 and <PKR62.23	=>200% Natl. =>PKR62.23
0–4	0.0	73.8	21.7	0.0	4.6	0.0
5–9	2.4	68.9	23.9	2.7	2.1	0.0
10–14	9.9	29.9	44.4	10.4	5.5	0.0
15–19	5.8	33.1	29.1	23.3	8.3	0.4
20–24	2.6	16.3	38.8	17.9	23.7	0.8
25–29	1.0	11.7	34.3	30.9	19.4	2.7
30–34	0.4	8.3	30.8	27.4	30.3	2.7
35–39	0.1	5.7	24.1	26.0	35.6	8.6
40–44	0.0	2.6	14.8	25.2	47.5	9.9
45–49	0.9	3.6	12.3	21.6	48.6	13.0
50–54	0.0	1.2	9.5	19.3	49.4	20.7
55–59	0.2	0.1	7.1	11.5	47.5	33.6
60–64	0.0	0.3	4.7	11.1	48.0	35.9
65–69	0.0	0.0	0.7	7.2	49.3	42.8
70–74	0.0	0.4	0.0	4.4	26.9	68.3
75–79	0.0	0.0	1.1	2.0	28.4	68.5
80–84	0.0	0.0	0.0	2.5	13.1	84.4
85–89	0.0	0.0	0.0	0.0	20.9	79.1
90–94	0.0	0.0	0.0	0.9	13.5	85.6
95–100	0.0	0.0	0.0	0.0	3.5	96.5

All poverty likelihoods in percentage units.

Figure 8 (cont.): Distribution of household poverty likelihoods across ranges demarcated by international 2005 PPP poverty lines in units of consumption per day per person

	Likelihood of having expenditure in range demarcated by poverty lines per			
	<$1.25/day	**=>$1.25/day and <$2.50/day**	**=>$2.50/day and <$3.75/day**	**=>$3.75/day**
Score	**<PKR26.88**	**=>PKR26.88 and <PKR53.76**	**=>PKR53.76 and <PKR80.64**	**=>PKR80.64**
0–4	95.4	4.6	0.0	0.0
5–9	95.0	5.0	0.0	0.0
10–14	79.1	20.9	0.0	0.0
15–19	67.5	31.7	0.4	0.4
20–24	56.8	42.0	0.7	0.6
25–29	47.5	48.5	4.0	0.0
30–34	36.4	59.7	3.6	0.2
35–39	27.2	64.1	7.1	1.6
40–44	14.2	74.5	10.2	1.2
45–49	12.0	72.6	12.5	3.0
50–54	7.1	65.7	21.9	5.3
55–59	4.0	54.4	32.9	8.7
60–64	1.3	53.5	29.1	16.1
65–69	0.7	47.5	33.0	18.9
70–74	0.4	26.4	40.3	32.9
75–79	0.8	25.2	25.6	48.4
80–84	0.0	11.7	34.2	54.1
85–89	0.0	16.1	34.8	49.2
90–94	0.0	3.1	20.5	76.4
95–100	0.0	3.5	24.3	72.3

All poverty likelihoods in percentage units.

Figure 9 (100% national line): Bootstrapped differences between estimated and true household poverty likelihoods with confidence intervals in a large sample (n = 16,384), 2005/6 scorecard applied to the 2005/6 validation sample

	Difference between estimate and true value			
		Confidence interval (+/– percentage points)		
Score	Diff.	90-percent	95-percent	99-percent
0–4	–4.6	2.3	2.3	2.3
5–9	–2.4	2.2	2.6	3.6
10–14	–6.2	4.6	4.9	5.5
15–19	+0.4	4.9	5.8	7.4
20–24	–1.0	3.5	4.2	5.6
25–29	+7.2	2.5	3.1	4.0
30–34	–11.3	7.1	7.4	7.9
35–39	+7.5	1.8	2.1	2.6
40–44	+0.2	1.5	1.8	2.5
45–49	+7.2	1.2	1.4	1.9
50–54	+1.0	1.7	2.0	2.7
55–59	+1.3	1.1	1.3	1.7
60–64	–1.3	1.3	1.6	2.1
65–69	–0.3	0.6	0.7	0.9
70–74	–0.8	0.8	0.8	1.1
75–79	+0.8	0.3	0.3	0.4
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

Figure 10 (All poverty lines): Differences, precision of differences, and the α factor for bootstrapped estimates of poverty rates for groups of households at a point in time, 2005/6 scorecard applied to the 2005/6 validation sample and to the 2004/5 PSLM and 2000/1 PIHS

	Poverty line							
	National line (per adult equivalent)					USAID	Intl. 2005 PPP (per person)		
	50%	75%	100%	125%	200%	'Extreme'	$1.25/day	$2.50/day	$3.75/day
Estimate minus true value									
2005/6 scorecard applied to 2005/6 validation	–0.0	–0.0	+1.1	+1.3	+2.0	+0.5	+0.6	+1.7	+0.5
2005/6 scorecard applied to all 2004/5	–0.7	–2.3	–1.4	+0.2	+5.7	–1.2	–1.4	+6.0	+4.1
2005/6 scorecard applied to all 2000/1	–1.3	–4.4	–5.5	–6.1	–1.7	–2.2	–5.3	–2.2	–0.5
Precision of difference									
2005/6 scorecard applied to 2005/6 validation	0.2	0.3	0.5	0.6	0.6	0.4	0.5	0.6	0.4
2005/6 scorecard applied to all 2004/5	0.1	0.3	0.5	0.6	0.6	0.4	0.5	0.6	0.5
2005/6 scorecard applied to all 2000/1	0.3	0.5	0.6	0.6	0.5	0.5	0.6	0.5	0.4
α for sample size									
2005/6 scorecard applied to 2005/6 validation	1.80	1.05	0.90	0.92	0.99	0.98	0.92	0.99	0.98
2005/6 scorecard applied to all 2004/5	1.70	1.10	1.03	0.97	1.04	1.03	1.03	1.02	1.09
2005/6 scorecard applied to all 2000/1	3.08	1.55	1.17	1.02	0.92	1.19	1.15	0.91	0.82
Precision is measured as 90-percent confidence intervals in units of +/– percentage points.									
Differences and precision estimated from 500 bootstraps of size 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.									
The USAID "extreme" line is in per-person units.									

Figure 11 (100% national line): Differences and precision of differences for bootstrapped estimates of poverty rates for groups of households at a point in time, by sample size, 2005/6 scorecard applied to the 2005/6 validation sample

Sample Size	Difference between estimate and true value			
		Confidence interval (+/− percentage points)		
n	Diff.	90-percent	95-percent	99-percent
1	+2.4	41.2	52.7	65.4
4	+2.0	30.3	35.9	47.6
8	+1.8	20.2	24.4	31.8
16	+1.2	14.6	17.4	22.2
32	+1.0	10.1	12.0	15.8
64	+1.0	7.4	8.7	11.4
128	+1.2	5.2	6.3	8.3
256	+1.1	3.6	4.3	5.7
512	+1.0	2.5	3.1	4.0
1,024	+1.1	1.8	2.2	2.8
2,048	+1.1	1.3	1.5	2.1
4,096	+1.1	0.9	1.1	1.4
8,192	+1.1	0.7	0.8	1.0
16,384	+1.1	0.5	0.5	0.8

Figure 12 (All poverty lines): Differences, precision of differences, and the α factor for bootstrapped estimates of changes in group's poverty rates between two points in time, 2005/6 scorecard applied to the 2005/6 validation sample and to the 2004/5 PSLM and 2000/1 PIHS

	Poverty line								
	National line (per adult equivalent)					USAID	Intl. 2005 PPP (per person)		
	50%	75%	100%	125%	200%	'Extreme'	$1.25/day	$2.50/day	$3.75/day
Estimated change minus true change									
2005/6 scorecard applied to 2005/6 validation and all 2004/5	–0.6	–2.2	–2.5	–1.1	+3.7	–1.6	–2.0	+4.3	+3.6
2005/6 scorecard applied to 2005/6 validation and all 2000/1	–1.3	–4.4	–6.6	–7.4	–3.7	–2.7	–5.9	–3.9	–1.0
Precision of estimated change minus true change									
2005/6 scorecard applied to 2005/6 validation and all 2004/5	0.2	0.4	0.7	0.9	0.9	0.5	0.7	0.9	0.6
2005/6 scorecard applied to 2005/6 validation and all 2000/1	0.3	0.5	0.8	0.8	0.8	0.6	0.7	0.8	0.6
α for sample size									
2005/6 scorecard applied to 2005/6 validation and all 2004/5	2.21	1.52	1.37	1.37	1.45	1.42	1.35	1.43	1.51
2005/6 scorecard applied to 2005/6 validation and all 2000/1	3.26	1.86	1.49	1.37	1.37	1.55	1.49	1.38	1.32
Precision is measured as 90-percent confidence intervals in units of +/– percentage points.									
Differences and precision estimated from 500 bootstraps of size 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.									
The USAID "extreme" line is in per-person units.									

Figure 13 (100% national line): Differences and precision of differences for bootstrapped estimates of changes in group's poverty rates between two points in time

This figure does not exist. It exists for the 2005/6 scorecard applied to the 2005/6 validation sample and the 2004/5 PSLM, and for the 2005/6 scorecard applied to the 2005/6 validation sample and the 2000/1 PIHS.

Figure 14 (All poverty lines): Possible types of outcomes from targeting by poverty score

True poverty status	Targeting segment: Targeted	Targeting segment: Non-targeted
Below poverty line	**Inclusion** Under poverty line Correctly Targeted	**Undercoverage** Under poverty line Mistakenly Non-targeted
Above poverty line	**Leakage** Above poverty line Mistakenly Targeted	**Exclusion** Above poverty line Correctly Non-targeted

Figure 15 (100% national line): Households by targeting classification and score, along with "Total Accuracy" and BPAC, 2005/6 scorecard applied to the 2005/6 validation sample

Score	Inclusion: < poverty line correctly targeted	Undercoverage: < poverty line mistakenly non-targeted	Leakage: => poverty line mistakenly targeted	Exclusion: => poverty line correctly non-targeted	Total Accuracy Inclusion + Exclusion	BPAC See text
0–4	0.1	19.5	0.0	80.3	80.5	–98.6
5–9	0.4	19.3	0.0	80.3	80.7	–95.8
10–14	1.4	18.3	0.2	80.1	81.5	–84.4
15–19	3.0	16.7	1.1	79.3	82.3	–64.2
20–24	5.5	14.2	2.9	77.4	82.9	–29.3
25–29	8.7	11.0	7.0	73.3	82.0	+23.9
30–34	12.2	7.5	11.2	69.1	81.3	+43.0
35–39	14.6	5.1	18.8	61.6	76.2	+4.7
40–44	16.7	3.0	26.8	53.5	70.2	–36.2
45–49	17.9	1.7	35.5	44.8	62.7	–80.6
50–54	18.6	1.1	42.3	38.1	56.6	–114.7
55–59	19.1	0.5	50.3	30.0	49.2	–155.6
60–64	19.5	0.2	58.0	22.4	41.9	–194.5
65–69	19.6	0.1	62.9	17.4	37.0	–219.8
70–74	19.6	0.0	67.4	13.0	32.6	–242.2
75–79	19.7	0.0	72.0	8.4	28.0	–265.7
80–84	19.7	0.0	76.3	4.0	23.7	–287.9
85–89	19.7	0.0	77.9	2.5	22.1	–295.6
90–94	19.7	0.0	79.6	0.7	20.4	–304.5
95–100	19.7	0.0	80.3	0.0	19.7	–308.1

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

Figure 16 (100% national line): Households below the poverty line and all households at a given score or at or below a given score cut-off, 2005/6 scorecard applied to the 2005/6 validation sample

Targeting cut-off	% all households who are targeted	% targeted who are poor	% of poor who are targeted	Poor households targeted per non-poor household targeted
0–4	0.1	100.0	0.7	Only poor targeted
5–9	0.4	92.9	2.0	13.1:1
10–14	1.6	86.7	7.2	6.5:1
15–19	4.1	74.1	15.2	2.9:1
20–24	8.4	65.2	27.9	1.9:1
25–29	15.7	55.3	44.1	1.2:1
30–34	23.4	52.1	62.0	1.1:1
35–39	33.4	43.8	74.2	0.8:1
40–44	43.5	38.4	84.9	0.6:1
45–49	53.5	33.6	91.2	0.5:1
50–54	60.8	30.5	94.4	0.4:1
55–59	69.4	27.6	97.3	0.4:1
60–64	77.5	25.2	99.2	0.3:1
65–69	82.5	23.7	99.5	0.3:1
70–74	87.0	22.6	99.8	0.3:1
75–79	91.6	21.5	100.0	0.3:1
80–84	96.0	20.5	100.0	0.3:1
85–89	97.5	20.2	100.0	0.3:1
90–94	99.3	19.8	100.0	0.2:1
95–100	100.0	19.7	100.0	0.2:1

50% National Poverty Line Tables

2005/6 Scorecard Applied to 2005/6 Validation Sample

Figure 6 (50% 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	0.0
5–9	2.4
10–14	9.9
15–19	5.8
20–24	2.6
25–29	1.0
30–34	0.4
35–39	0.1
40–44	0.0
45–49	0.9
50–54	0.0
55–59	0.2
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

Figure 9 (50% national line): Bootstrapped differences between estimated and true household poverty likelihoods with confidence intervals in a large sample (n = 16,384), 2005/6 scorecard applied to the 2005/6 validation sample

	Difference between estimate and true value			
		Confidence interval (+/− percentage points)		
Score	Diff.	90-percent	95-percent	99-percent
0–4	–0.0	0.1	0.1	0.1
5–9	–84.1	44.8	45.1	45.8
10–14	+5.7	2.1	2.5	3.4
15–19	+5.2	0.5	0.7	0.8
20–24	+2.0	0.4	0.5	0.7
25–29	+0.4	0.4	0.5	0.6
30–34	–0.4	0.4	0.5	0.6
35–39	+0.1	0.0	0.0	0.0
40–44	–0.0	0.1	0.1	0.1
45–49	+0.9	0.0	0.0	0.0
50–54	+0.0	0.0	0.0	0.0
55–59	+0.1	0.1	0.2	0.2
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

Figure 11 (50% national line): Differences and precision of differences for bootstrapped estimates of poverty rates for groups of households at a point in time, by sample size, 2005/6 scorecard applied to the 2005/6 validation sample

Sample Size	Difference between estimate and true value			
		Confidence interval (+/− percentage points)		
n	Diff.	90-percent	95-percent	99-percent
1	+0.4	1.3	1.8	3.3
4	+0.3	0.9	1.3	12.2
8	+0.2	0.7	1.0	8.0
16	+0.0	1.5	3.5	11.2
32	+0.0	1.7	5.2	6.5
64	+0.0	2.7	3.0	3.8
128	+0.0	1.5	1.8	2.8
256	+0.0	0.9	1.1	2.0
512	+0.0	0.8	0.9	1.2
1,024	+0.0	0.6	0.7	0.9
2,048	–0.0	0.4	0.5	0.7
4,096	–0.0	0.3	0.4	0.5
8,192	–0.0	0.2	0.3	0.3
16,384	–0.0	0.2	0.2	0.2

Figure 13 (50% national line): Differences and precision of differences for bootstrapped estimates of changes in group's poverty rates between two points in time

This figure does not exist. It exists for the 2005/6 scorecard applied to the 2005/6 validation sample and the 2004/5 PSLM, and for the 2005/6 scorecard applied to the 2005/6 validation sample and the 2000/1 PIHS.

Figure 15 (50% national line): Households by targeting classification and score, along with "Total Accuracy" and BPAC, 2005/6 scorecard applied to the 2005/6 validation sample

Score	Inclusion: < poverty line correctly targeted	Undercoverage: < poverty line mistakenly non-targeted	Leakage: => poverty line mistakenly targeted	Exclusion: => poverty line correctly non-targeted	Total Accuracy Inclusion + Exclusion	BPAC See text
0–4	0.0	0.4	0.1	99.5	99.5	–63.8
5–9	0.1	0.3	0.3	99.3	99.4	+18.4
10–14	0.2	0.2	1.5	98.1	98.3	–267.3
15–19	0.2	0.2	3.8	95.8	96.0	–870.2
20–24	0.2	0.1	8.2	91.4	91.7	–1,964.6
25–29	0.3	0.1	15.4	84.2	84.5	–3,789.9
30–34	0.4	0.0	23.1	76.6	76.9	–5,722.4
35–39	0.4	0.0	33.0	66.6	67.0	–8,233.5
40–44	0.4	0.0	43.1	56.5	56.8	–10,794.0
45–49	0.4	0.0	53.1	46.5	46.9	–13,313.3
50–54	0.4	0.0	60.5	39.2	39.5	–15,167.6
55–59	0.4	0.0	69.1	30.6	30.9	–17,340.3
60–64	0.4	0.0	77.1	22.5	22.9	–19,370.9
65–69	0.4	0.0	82.1	17.5	17.9	–20,640.6
70–74	0.4	0.0	86.6	13.0	13.4	–21,771.9
75–79	0.4	0.0	91.3	8.4	8.7	–22,946.7
80–84	0.4	0.0	95.6	4.0	4.4	–24,051.0
85–89	0.4	0.0	97.1	2.5	2.9	–24,433.9
90–94	0.4	0.0	98.9	0.7	1.1	–24,877.2
95–100	0.4	0.0	99.6	0.0	0.4	–25,056.3

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

Figure 16 (50% national line): Households below the poverty line and all households at a given score or at or below a given score cut-off, 2005/6 scorecard applied to the 2005/6 validation sample

Targeting cut-off	% all households who are targeted	% targeted who are poor	% of poor who are targeted	Poor households targeted per non-poor household targeted
0–4	0.1	1.3	0.4	0.0:1
5–9	0.4	25.0	27.2	0.3:1
10–14	1.6	11.4	47.1	0.1:1
15–19	4.1	5.2	52.9	0.1:1
20–24	8.4	2.9	62.2	0.0:1
25–29	15.7	1.9	74.0	0.0:1
30–34	23.4	1.6	91.9	0.0:1
35–39	33.4	1.1	91.9	0.0:1
40–44	43.5	0.9	95.3	0.0:1
45–49	53.5	0.7	95.3	0.0:1
50–54	60.8	0.6	95.3	0.0:1
55–59	69.4	0.6	100.0	0.0:1
60–64	77.5	0.5	100.0	0.0:1
65–69	82.5	0.5	100.0	0.0:1
70–74	87.0	0.5	100.0	0.0:1
75–79	91.6	0.4	100.0	0.0:1
80–84	96.0	0.4	100.0	0.0:1
85–89	97.5	0.4	100.0	0.0:1
90–94	99.3	0.4	100.0	0.0:1
95–100	100.0	0.4	100.0	0.0:1

75% National Poverty Line Tables

2005/6 Scorecard Applied to 2005/6 Validation Sample

Figure 6 (75% 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	73.8
5–9	71.2
10–14	39.7
15–19	38.9
20–24	18.9
25–29	12.7
30–34	8.7
35–39	5.8
40–44	2.6
45–49	4.6
50–54	1.2
55–59	0.3
60–64	0.3
65–69	0.0
70–74	0.4
75–79	0.0
80–84	0.0
85–89	0.0
90–94	0.0
95–100	0.0

Figure 9 (75% national line): Bootstrapped differences between estimated and true household poverty likelihoods with confidence intervals in a large sample (n = 16,384), 2005/6 scorecard applied to the 2005/6 validation sample

	Difference between estimate and true value			
		Confidence interval (+/– percentage points)		
Score	Diff.	90-percent	95-percent	99-percent
0–4	–26.2	13.1	13.1	13.1
5–9	–22.8	12.9	13.3	13.5
10–14	–27.4	16.7	17.3	18.4
15–19	+3.4	6.0	6.9	8.9
20–24	–5.5	4.6	4.9	5.7
25–29	+3.4	1.4	1.6	2.1
30–34	–1.1	1.4	1.7	2.2
35–39	+0.0	1.0	1.3	1.8
40–44	+1.3	0.4	0.5	0.6
45–49	+4.1	0.2	0.3	0.4
50–54	+0.5	0.3	0.4	0.5
55–59	+0.1	0.1	0.2	0.2
60–64	–2.1	1.6	1.7	1.9
65–69	+0.0	0.0	0.0	0.0
70–74	+0.4	0.0	0.0	0.0
75–79	–0.1	0.1	0.1	0.2
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

Figure 11 (75% national line): Differences and precision of differences for bootstrapped estimates of poverty rates for groups of households at a point in time, by sample size, 2005/6 scorecard applied to the 2005/6 validation sample

Sample Size	Difference between estimate and true value			
		Confidence interval (+/− percentage points)		
n	Diff.	90-percent	95-percent	99-percent
1	+0.7	22.9	33.5	49.0
4	–0.1	17.0	25.6	36.5
8	+0.0	11.5	15.6	23.2
16	–0.0	9.1	11.2	16.6
32	–0.1	6.4	7.6	10.2
64	+0.0	4.8	6.0	7.5
128	+0.0	3.4	4.0	5.4
256	+0.0	2.5	2.9	3.9
512	–0.0	1.7	2.0	2.6
1,024	–0.0	1.2	1.4	1.8
2,048	–0.0	0.8	1.0	1.3
4,096	–0.0	0.6	0.7	0.9
8,192	–0.0	0.4	0.5	0.6
16,384	–0.0	0.3	0.4	0.4

Figure 13 (75% national line): Differences and precision of differences for bootstrapped estimates of changes in group's poverty rates between two points in time

This figure does not exist. It exists for the 2005/6 scorecard applied to the 2005/6 validation sample and the 2004/5 PSLM, and for the 2005/6 scorecard applied to the 2005/6 validation sample and the 2000/1 PIHS.

Figure 15 (75% national line): Households by targeting classification and score, along with "Total Accuracy" and BPAC, 2005/6 scorecard applied to the 2005/6 validation sample

Score	Inclusion: < poverty line correctly targeted	Undercoverage: < poverty line mistakenly non-targeted	Leakage: => poverty line mistakenly targeted	Exclusion: => poverty line correctly non-targeted	Total Accuracy Inclusion + Exclusion	BPAC See text
0–4	0.1	5.0	0.0	94.8	95.0	–94.5
5–9	0.3	4.8	0.1	94.8	95.1	–84.9
10–14	0.9	4.2	0.7	94.1	95.1	–50.0
15–19	1.5	3.6	2.5	92.3	93.9	+8.3
20–24	2.5	2.7	6.0	88.9	91.3	–15.4
25–29	3.3	1.9	12.4	82.4	85.7	–140.7
30–34	4.1	1.1	19.3	75.5	79.6	–274.3
35–39	4.7	0.5	28.7	66.1	70.8	–455.5
40–44	4.9	0.3	38.7	56.2	61.0	–648.6
45–49	4.9	0.2	48.5	46.3	51.2	–839.9
50–54	5.0	0.1	55.8	39.0	44.1	–980.5
55–59	5.1	0.1	64.4	30.4	35.5	–1,146.8
60–64	5.2	0.0	72.3	22.5	27.6	–1,300.7
65–69	5.2	0.0	77.4	17.5	22.6	–1,398.0
70–74	5.2	0.0	81.8	13.0	18.1	–1,484.8
75–79	5.2	0.0	86.5	8.4	13.5	–1,574.6
80–84	5.2	0.0	90.9	4.0	9.1	–1,659.3
85–89	5.2	0.0	92.4	2.5	7.6	–1,688.6
90–94	5.2	0.0	94.1	0.7	5.9	–1,722.6
95–100	5.2	0.0	94.8	0.0	5.2	–1,736.4

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

Figure 16 (75% national line): Households below the poverty line and all households at a given score or at or below a given score cut-off, 2005/6 scorecard applied to the 2005/6 validation sample

Targeting cut-off	% all households who are targeted	% targeted who are poor	% of poor who are targeted	Poor households targeted per non-poor household targeted
0–4	0.1	99.2	2.7	124.8:1
5–9	0.4	81.1	6.8	4.3:1
10–14	1.6	57.5	18.3	1.4:1
15–19	4.1	38.1	29.9	0.6:1
20–24	8.4	29.2	47.7	0.4:1
25–29	15.7	20.8	63.2	0.3:1
30–34	23.4	17.4	79.1	0.2:1
35–39	33.4	14.0	90.5	0.2:1
40–44	43.5	11.2	94.0	0.1:1
45–49	53.5	9.2	95.7	0.1:1
50–54	60.8	8.3	97.4	0.1:1
55–59	69.4	7.3	97.9	0.1:1
60–64	77.5	6.6	99.7	0.1:1
65–69	82.5	6.2	99.8	0.1:1
70–74	87.0	5.9	99.8	0.1:1
75–79	91.6	5.6	100.0	0.1:1
80–84	96.0	5.4	100.0	0.1:1
85–89	97.5	5.3	100.0	0.1:1
90–94	99.3	5.2	100.0	0.1:1
95–100	100.0	5.2	100.0	0.1:1

125% National Poverty Line Tables

2005/6 Scorecard Applied to 2005/6 Validation Sample

Figure 6 (125% 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	97.9
10–14	94.5
15–19	91.3
20–24	75.5
25–29	78.0
30–34	67.0
35–39	55.8
40–44	42.6
45–49	38.4
50–54	29.9
55–59	18.9
60–64	16.1
65–69	7.9
70–74	4.8
75–79	3.2
80–84	2.5
85–89	0.0
90–94	0.9
95–100	0.0

Figure 9 (125% national line): Bootstrapped differences between estimated and true household poverty likelihoods with confidence intervals in a large sample (n = 16,384), 2005/6 scorecard applied to the 2005/6 validation sample

	Difference between estimate and true value			
		Confidence interval (+/− percentage points)		
Score	Diff.	90-percent	95-percent	99-percent
0–4	–4.6	2.3	2.3	2.3
5–9	–2.1	1.1	1.1	1.1
10–14	+0.1	2.8	3.3	4.4
15–19	+11.6	4.4	5.2	7.2
20–24	–3.6	3.2	3.5	4.4
25–29	+7.9	2.5	2.9	3.6
30–34	–4.6	3.5	3.7	4.4
35–39	+5.1	2.3	2.7	3.6
40–44	+0.7	2.2	2.6	3.3
45–49	+5.6	2.1	2.4	3.3
50–54	+3.0	2.4	2.9	4.0
55–59	–1.2	1.9	2.2	2.9
60–64	+1.5	1.8	2.2	2.8
65–69	+1.1	1.5	1.8	2.4
70–74	+0.1	1.3	1.5	2.0
75–79	–6.0	4.1	4.3	4.8
80–84	–1.5	1.5	1.8	2.4
85–89	+0.0	0.0	0.0	0.0
90–94	+0.9	0.0	0.0	0.0
95–100	+0.0	0.0	0.0	0.0

Figure 11 (125% national line): Differences and precision of differences for bootstrapped estimates of poverty rates for groups of households at a point in time, by sample size, 2005/6 scorecard applied to the 2005/6 validation sample

Sample Size	Difference between estimate and true value			
		Confidence interval (+/− percentage points)		
n	Diff.	90-percent	95-percent	99-percent
1	+1.7	49.5	56.8	75.1
4	+1.8	37.1	44.0	54.8
8	+1.9	26.4	31.4	41.6
16	+1.3	18.1	22.1	30.0
32	+1.3	12.4	15.0	20.1
64	+1.4	9.1	10.8	14.0
128	+1.4	6.7	7.7	10.1
256	+1.4	4.5	5.5	7.1
512	+1.3	3.2	3.8	4.8
1,024	+1.4	2.3	2.7	3.3
2,048	+1.4	1.6	1.9	2.5
4,096	+1.3	1.2	1.4	1.7
8,192	+1.3	0.8	1.0	1.3
16,384	+1.3	0.6	0.6	0.9

Figure 13 (125% national line): Differences and precision of differences for bootstrapped estimates of changes in group's poverty rates between two points in time

This figure does not exist. It exists for the 2005/6 scorecard applied to the 2005/6 validation sample and the 2004/5 PSLM, and for the 2005/6 scorecard applied to the 2005/6 validation sample and the 2000/1 PIHS.

Figure 15 (125% national line): Households by targeting classification and score, along with "Total Accuracy" and BPAC, 2005/6 scorecard applied to the 2005/6 validation sample

Score	Inclusion: < poverty line correctly targeted	Undercoverage: < poverty line mistakenly non-targeted	Leakage: => poverty line mistakenly targeted	Exclusion: => poverty line correctly non-targeted	Total Accuracy Inclusion + Exclusion	BPAC See text
0–4	0.1	37.3	0.0	62.6	62.7	–99.2
5–9	0.4	37.0	0.0	62.6	63.0	–97.7
10–14	1.6	35.9	0.1	62.5	64.0	–91.5
15–19	3.5	33.9	0.5	62.1	65.6	–79.7
20–24	7.1	30.4	1.4	61.2	68.3	–58.7
25–29	12.2	25.3	3.5	59.1	71.2	–25.5
30–34	17.6	19.9	5.9	56.7	74.3	+9.5
35–39	22.9	14.5	10.5	52.1	75.0	+50.3
40–44	27.6	9.8	15.9	46.7	74.3	+57.5
45–49	31.3	6.1	22.2	40.4	71.7	+40.7
50–54	33.4	4.0	27.4	35.1	68.5	+26.7
55–59	35.2	2.2	34.2	28.4	63.6	+8.5
60–64	36.3	1.1	41.2	21.4	57.8	–10.0
65–69	36.7	0.7	45.8	16.8	53.5	–22.3
70–74	37.0	0.5	50.0	12.5	49.5	–33.7
75–79	37.3	0.1	54.4	8.2	45.5	–45.2
80–84	37.4	0.0	58.6	4.0	41.4	–56.6
85–89	37.4	0.0	60.1	2.5	39.9	–60.6
90–94	37.4	0.0	61.9	0.7	38.1	–65.3
95–100	37.4	0.0	62.6	0.0	37.4	–67.2

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

Figure 16 (125% national line): Households below the poverty line and all households at a given score or at or below a given score cut-off, 2005/6 scorecard applied to the 2005/6 validation sample

Targeting cut-off	% all households who are targeted	% targeted who are poor	% of poor who are targeted	Poor households targeted per non-poor household targeted
0–4	0.1	100.0	0.4	Only poor targeted
5–9	0.4	99.5	1.1	221.1:1
10–14	1.6	94.8	4.2	18.1:1
15–19	4.1	87.2	9.4	6.8:1
20–24	8.4	83.7	18.8	5.1:1
25–29	15.7	77.5	32.5	3.5:1
30–34	23.4	75.0	46.9	3.0:1
35–39	33.4	68.6	61.2	2.2:1
40–44	43.5	63.4	73.7	1.7:1
45–49	53.5	58.5	83.7	1.4:1
50–54	60.8	54.9	89.2	1.2:1
55–59	69.4	50.7	94.1	1.0:1
60–64	77.5	46.9	97.1	0.9:1
65–69	82.5	44.5	98.2	0.8:1
70–74	87.0	42.5	98.8	0.7:1
75–79	91.6	40.7	99.7	0.7:1
80–84	96.0	39.0	100.0	0.6:1
85–89	97.5	38.4	100.0	0.6:1
90–94	99.3	37.7	100.0	0.6:1
95–100	100.0	37.4	100.0	0.6:1

200% National Poverty Line Tables

2005/6 Scorecard Applied to 2005/6 Validation Sample

Figure 6 (200% 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	100.0
5–9	100.0
10–14	100.0
15–19	99.6
20–24	99.2
25–29	97.3
30–34	97.3
35–39	91.4
40–44	90.1
45–49	87.0
50–54	79.3
55–59	66.4
60–64	64.1
65–69	57.2
70–74	31.7
75–79	31.5
80–84	15.6
85–89	20.9
90–94	14.4
95–100	3.5

Figure 9 (200% national line): Bootstrapped differences between estimated and true household poverty likelihoods with confidence intervals in a large sample (n = 16,384), 2005/6 scorecard applied to the 2005/6 validation sample

	Difference between estimate and true value			
		Confidence interval (+/– percentage points)		
Score	Diff.	90-percent	95-percent	99-percent
0–4	+0.0	0.0	0.0	0.0
5–9	+0.0	0.0	0.0	0.0
10–14	+0.0	0.0	0.0	0.0
15–19	–0.3	0.2	0.2	0.3
20–24	+3.6	1.4	1.6	2.1
25–29	+1.8	1.2	1.4	2.0
30–34	+1.9	1.1	1.3	1.6
35–39	–2.2	1.6	1.7	1.9
40–44	+0.6	1.3	1.6	2.1
45–49	+3.6	1.8	2.2	2.8
50–54	+6.2	2.6	3.2	4.0
55–59	+1.5	2.4	2.9	3.7
60–64	+3.1	2.5	2.9	3.8
65–69	+16.4	3.2	3.8	4.8
70–74	–9.5	6.6	6.9	7.4
75–79	+1.2	3.1	3.8	4.9
80–84	+0.2	2.5	3.1	4.1
85–89	+1.2	4.6	5.3	7.8
90–94	+11.4	1.7	2.0	2.7
95–100	–13.5	10.3	10.9	12.3

Figure 11 (200% national line): Differences and precision of differences for bootstrapped estimates of poverty rates for groups of households at a point in time, by sample size, 2005/6 scorecard applied to the 2005/6 validation sample

Sample Size	Difference between estimate and true value			
		Confidence interval (+/− percentage points)		
n	Diff.	90-percent	95-percent	99-percent
1	+2.9	42.5	54.8	73.4
4	+2.2	34.1	41.8	55.7
8	+2.2	24.4	28.9	38.8
16	+2.2	18.1	21.4	27.8
32	+2.1	12.9	15.0	19.9
64	+1.9	9.2	10.8	14.1
128	+1.9	6.4	7.8	10.7
256	+1.9	4.6	5.5	7.1
512	+2.0	3.1	3.8	4.7
1,024	+2.0	2.2	2.5	3.3
2,048	+2.0	1.7	2.0	2.6
4,096	+2.0	1.1	1.3	1.9
8,192	+2.0	0.8	0.9	1.3
16,384	+2.0	0.6	0.7	0.9

Figure 13 (200% national line): Differences and precision of differences for bootstrapped estimates of changes in group's poverty rates between two points in time

This figure does not exist. It exists for the 2005/6 scorecard applied to the 2005/6 validation sample and the 2004/5 PSLM, and for the 2005/6 scorecard applied to the 2005/6 validation sample and the 2000/1 PIHS.

Figure 15 (200% national line): Households by targeting classification and score, along with "Total Accuracy" and BPAC, 2005/6 scorecard applied to the 2005/6 validation sample

Score	Inclusion: < poverty line correctly targeted	Undercoverage: < poverty line mistakenly non-targeted	Leakage: => poverty line mistakenly targeted	Exclusion: => poverty line correctly non-targeted	Total Accuracy Inclusion + Exclusion	BPAC See text
0–4	0.1	72.1	0.0	27.7	27.9	–99.6
5–9	0.4	71.9	0.0	27.7	28.1	–98.8
10–14	1.6	70.6	0.0	27.7	29.4	–95.5
15–19	4.0	68.2	0.0	27.7	31.7	–88.8
20–24	8.2	64.0	0.2	27.5	35.8	–76.9
25–29	15.3	57.0	0.4	27.3	42.5	–57.2
30–34	22.6	49.7	0.8	26.9	49.6	–36.3
35–39	32.0	40.3	1.4	26.3	58.3	–9.6
40–44	41.1	31.2	2.4	25.3	66.4	+17.1
45–49	49.7	22.6	3.8	23.9	73.6	+42.8
50–54	55.3	17.0	5.6	22.2	77.4	+60.6
55–59	61.0	11.2	8.4	19.3	80.4	+80.5
60–64	66.0	6.3	11.5	16.2	82.1	+84.0
65–69	68.1	4.2	14.5	13.3	81.3	+80.0
70–74	69.8	2.5	17.2	10.5	80.3	+76.2
75–79	71.2	1.1	20.5	7.2	78.4	+71.7
80–84	71.8	0.4	24.2	3.5	75.4	+66.5
85–89	72.1	0.2	25.4	2.3	74.4	+64.8
90–94	72.2	0.1	27.1	0.6	72.8	+62.5
95–100	72.3	0.0	27.7	0.0	72.3	+61.7

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

Figure 16 (200% national line): Households below the poverty line and all households at a given score or at or below a given score cut-off, 2005/6 scorecard applied to the 2005/6 validation sample

Targeting cut-off	% all households who are targeted	% targeted who are poor	% of poor who are targeted	Poor households targeted per non-poor household targeted
0–4	0.1	100.0	0.2	Only poor targeted
5–9	0.4	100.0	0.6	Only poor targeted
10–14	1.6	100.0	2.3	Only poor targeted
15–19	4.1	99.7	5.6	339.6:1
20–24	8.4	97.9	11.4	45.8:1
25–29	15.7	97.3	21.1	35.4:1
30–34	23.4	96.6	31.3	28.8:1
35–39	33.4	95.9	44.3	23.4:1
40–44	43.5	94.5	56.9	17.2:1
45–49	53.5	92.9	68.8	13.1:1
50–54	60.8	90.9	76.5	9.9:1
55–59	69.4	87.9	84.5	7.3:1
60–64	77.5	85.1	91.2	5.7:1
65–69	82.5	82.5	94.1	4.7:1
70–74	87.0	80.2	96.6	4.1:1
75–79	91.6	77.6	98.4	3.5:1
80–84	96.0	74.8	99.4	3.0:1
85–89	97.5	73.9	99.8	2.8:1
90–94	99.3	72.7	99.9	2.7:1
95–100	100.0	72.3	100.0	2.6:1

USAID "Extreme" Poverty Line Tables

2005/6 Scorecard Applied to 2005/6 Validation Sample

Figure 6 (USAID "extreme" 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	72.9
5–9	68.4
10–14	54.5
15–19	43.1
20–24	36.1
25–29	25.0
30–34	16.2
35–39	12.9
40–44	7.0
45–49	8.0
50–54	3.9
55–59	2.8
60–64	0.9
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

Figure 9 (USAID "extreme" line): Bootstrapped differences between estimated and true household poverty likelihoods with confidence intervals in a large sample (n = 16,384), 2005/6 scorecard applied to the 2005/6 validation sample

	Difference between estimate and true value			
		Confidence interval (+/– percentage points)		
Score	Diff.	90-percent	95-percent	99-percent
0–4	+71.3	1.4	1.7	2.4
5–9	–25.6	14.3	14.6	14.9
10–14	–21.4	13.3	13.8	14.5
15–19	–2.6	5.5	6.5	8.1
20–24	–4.8	4.2	4.6	5.9
25–29	+5.8	1.9	2.3	3.2
30–34	–1.9	1.9	2.3	3.0
35–39	+0.1	1.5	1.7	2.2
40–44	+0.2	1.0	1.2	1.7
45–49	+4.3	0.7	0.9	1.1
50–54	+1.1	0.9	1.1	1.3
55–59	+1.3	0.5	0.6	0.8
60–64	–1.6	1.3	1.4	1.6
65–69	–0.5	0.6	0.6	0.8
70–74	+0.0	0.0	0.0	0.0
75–79	–0.1	0.1	0.1	0.2
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

Figure 11 (USAID "extreme" line): Differences and precision of differences for bootstrapped estimates of poverty rates for groups of households at a point in time, by sample size, 2005/6 scorecard applied to the 2005/6 validation sample

Sample Size	Difference between estimate and true value			
		Confidence interval (+/− percentage points)		
n	Diff.	90-percent	95-percent	99-percent
1	+0.9	33.1	43.4	61.3
4	+0.2	23.1	29.0	42.3
8	+0.1	15.9	19.5	27.6
16	+0.2	11.3	14.3	22.5
32	+0.2	8.0	9.6	13.5
64	+0.4	5.7	7.1	9.4
128	+0.5	4.3	5.3	6.4
256	+0.5	3.0	3.6	5.1
512	+0.4	2.1	2.6	3.4
1,024	+0.5	1.5	1.8	2.3
2,048	+0.5	1.1	1.3	1.7
4,096	+0.5	0.7	0.9	1.1
8,192	+0.4	0.5	0.7	0.8
16,384	+0.5	0.4	0.4	0.6

Figure 13 (USAID "extreme" line): Differences and precision of differences for bootstrapped estimates of changes in group's poverty rates between two points in time

This figure does not exist. It exists for the 2005/6 scorecard applied to the 2005/6 validation sample and the 2004/5 PSLM, and for the 2005/6 scorecard applied to the 2005/6 validation sample and the 2000/1 PIHS.

Figure 15 (USAID "extreme" line): Households by targeting classification and score, along with "Total Accuracy" and BPAC, 2005/6 scorecard applied to the 2005/6 validation sample

Score	Inclusion: < poverty line correctly targeted	Undercoverage: < poverty line mistakenly non-targeted	Leakage: => poverty line mistakenly targeted	Exclusion: => poverty line correctly non-targeted	Total Accuracy Inclusion + Exclusion	BPAC See text
0–4	0.0	9.7	0.1	90.1	90.2	–98.2
5–9	0.2	9.5	0.2	90.1	90.3	–93.1
10–14	1.0	8.7	0.6	89.6	90.6	–72.9
15–19	1.9	7.8	2.1	88.1	90.1	–38.7
20–24	3.5	6.2	4.9	85.3	88.9	+22.5
25–29	5.2	4.6	10.5	79.7	84.9	–8.2
30–34	6.7	3.1	16.8	73.5	80.2	–72.0
35–39	8.0	1.8	25.4	64.9	72.9	–160.5
40–44	8.7	1.0	34.8	55.5	64.2	–257.1
45–49	9.2	0.5	44.3	46.0	55.2	–354.5
50–54	9.4	0.3	51.4	38.9	48.3	–427.6
55–59	9.6	0.2	59.9	30.4	40.0	–514.5
60–64	9.7	0.1	67.8	22.5	32.1	–596.1
65–69	9.7	0.0	72.8	17.5	27.2	–647.2
70–74	9.7	0.0	77.3	13.0	22.7	–693.2
75–79	9.7	0.0	81.9	8.4	18.1	–740.8
80–84	9.7	0.0	86.3	4.0	13.7	–785.7
85–89	9.7	0.0	87.8	2.5	12.2	–801.2
90–94	9.7	0.0	89.5	0.7	10.5	–819.3
95–100	9.7	0.0	90.3	0.0	9.7	–826.5

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

Figure 16 (USAID "extreme" line): Households below the poverty line and all households at a given score or at or below a given score cut-off, 2005/6 scorecard applied to the 2005/6 validation sample

Targeting cut-off	% all households who are targeted	% targeted who are poor	% of poor who are targeted	Poor households targeted per non-poor household targeted
0–4	0.1	21.9	0.3	0.3:1
5–9	0.4	55.6	2.5	1.3:1
10–14	1.6	60.6	10.2	1.5:1
15–19	4.1	47.4	19.7	0.9:1
20–24	8.4	41.7	36.0	0.7:1
25–29	15.7	32.9	53.0	0.5:1
30–34	23.4	28.4	68.3	0.4:1
35–39	33.4	23.9	81.9	0.3:1
40–44	43.5	20.1	89.6	0.3:1
45–49	53.5	17.2	94.6	0.2:1
50–54	60.8	15.5	96.8	0.2:1
55–59	69.4	13.8	98.4	0.2:1
60–64	77.5	12.5	99.4	0.1:1
65–69	82.5	11.8	99.9	0.1:1
70–74	87.0	11.2	99.9	0.1:1
75–79	91.6	10.6	100.0	0.1:1
80–84	96.0	10.1	100.0	0.1:1
85–89	97.5	10.0	100.0	0.1:1
90–94	99.3	9.8	100.0	0.1:1
95–100	100.0	9.7	100.0	0.1:1

$1.25/day 2005 PPP Poverty Line Tables

2005/6 Scorecard Applied to 2005/6 Validation Sample

Figure 6 ($1.25/day 2005 PPP 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	95.0
10–14	79.1
15–19	67.5
20–24	56.8
25–29	47.5
30–34	36.4
35–39	27.2
40–44	14.2
45–49	12.0
50–54	7.1
55–59	4.0
60–64	1.3
65–69	0.7
70–74	0.4
75–79	0.8
80–84	0.0
85–89	0.0
90–94	0.0
95–100	0.0

Figure 9 ($1.25/day 2005 PPP line): Bootstrapped differences between estimated and true household poverty likelihoods with confidence intervals in a large sample (n = 16,384), 2005/6 scorecard applied to the 2005/6 validation sample

	Difference between estimate and true value			
		Confidence interval (+/– percentage points)		
Score	Diff.	90-percent	95-percent	99-percent
0–4	–4.6	2.3	2.3	2.3
5–9	–2.4	2.3	2.7	3.6
10–14	–11.1	7.1	7.4	7.9
15–19	+2.9	5.0	5.8	7.6
20–24	+0.6	3.7	4.3	5.6
25–29	+7.9	2.5	3.1	4.1
30–34	–13.2	8.1	8.4	9.0
35–39	+7.5	1.7	2.1	2.6
40–44	–1.5	1.5	1.7	2.4
45–49	+4.7	1.0	1.2	1.6
50–54	+2.7	1.1	1.3	1.7
55–59	+0.5	0.8	1.0	1.3
60–64	–3.2	2.2	2.4	2.7
65–69	–0.1	0.5	0.7	0.8
70–74	+0.4	0.0	0.0	0.0
75–79	+0.7	0.1	0.1	0.2
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

Figure 11 ($1.25/day 2005 PPP line): Differences and precision of differences for bootstrapped estimates of poverty rates for groups of households at a point in time, by sample size, 2005/6 scorecard applied to the 2005/6 validation sample

Sample Size	Difference between estimate and true value			
		Confidence interval (+/− percentage points)		
n	Diff.	90-percent	95-percent	99-percent
1	+1.5	39.7	48.5	65.6
4	+1.2	28.5	34.7	47.3
8	+0.9	18.8	22.5	31.4
16	+0.4	13.9	16.7	21.2
32	+0.3	9.5	11.8	15.2
64	+0.4	7.1	8.1	11.0
128	+0.6	5.0	6.1	8.1
256	+0.6	3.6	4.2	5.5
512	+0.5	2.5	3.0	4.2
1,024	+0.6	1.8	2.2	2.7
2,048	+0.6	1.3	1.6	2.0
4,096	+0.6	0.9	1.1	1.3
8,192	+0.6	0.7	0.8	1.0
16,384	+0.6	0.5	0.5	0.7

Figure 13 ($1.25/day 2005 PPP line): Differences and precision of differences for bootstrapped estimates of changes in group's poverty rates between two points in time

This figure does not exist. It exists for the 2005/6 scorecard applied to the 2005/6 validation sample and the 2004/5 PSLM, and for the 2005/6 scorecard applied to the 2005/6 validation sample and the 2000/1 PIHS.

Figure 15 ($1.25/day 2005 PPP line): Households by targeting classification and score, along with "Total Accuracy" and BPAC, 2005/6 scorecard applied to the 2005/6 validation sample

Score	Inclusion: < poverty line correctly targeted	Undercoverage: < poverty line mistakenly non-targeted	Leakage: => poverty line mistakenly targeted	Exclusion: => poverty line correctly non-targeted	Total Accuracy Inclusion + Exclusion	BPAC See text
0–4	0.1	17.4	0.0	82.5	82.6	–98.4
5–9	0.4	17.1	0.0	82.4	82.8	–95.3
10–14	1.4	16.1	0.2	82.2	83.7	–82.5
15–19	2.9	14.6	1.1	81.3	84.2	–60.3
20–24	5.3	12.2	3.1	79.4	84.7	–21.7
25–29	8.4	9.2	7.3	75.1	83.5	+37.2
30–34	11.8	5.8	11.6	70.8	82.6	+33.6
35–39	13.8	3.7	19.5	62.9	76.8	–11.3
40–44	15.6	1.9	27.9	54.6	70.3	–58.9
45–49	16.6	0.9	36.9	45.6	62.1	–110.4
50–54	16.9	0.6	43.9	38.6	55.5	–150.4
55–59	17.3	0.3	52.2	30.3	47.5	–197.6
60–64	17.5	0.1	60.0	22.5	39.9	–242.2
65–69	17.5	0.0	65.0	17.5	35.0	–270.7
70–74	17.5	0.0	69.5	13.0	30.5	–296.2
75–79	17.5	0.0	74.1	8.4	25.9	–322.7
80–84	17.5	0.0	78.5	4.0	21.5	–347.6
85–89	17.5	0.0	80.0	2.5	20.0	–356.2
90–94	17.5	0.0	81.8	0.7	18.2	–366.2
95–100	17.5	0.0	82.5	0.0	17.5	–370.3

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

Figure 16 ($1.25/day 2005 PPP line): Households below the poverty line and all households at a given score or at or below a given score cut-off, 2005/6 scorecard applied to the 2005/6 validation sample

Targeting cut-off	% all households who are targeted	% targeted who are poor	% of poor who are targeted	Poor households targeted per non-poor household targeted
0–4	0.1	100.0	0.8	Only poor targeted
5–9	0.4	92.1	2.3	11.7:1
10–14	1.6	86.5	8.1	6.4:1
15–19	4.1	71.9	16.6	2.6:1
20–24	8.4	63.0	30.3	1.7:1
25–29	15.7	53.3	47.7	1.1:1
30–34	23.4	50.3	67.1	1.0:1
35–39	33.4	41.5	78.9	0.7:1
40–44	43.5	36.0	89.2	0.6:1
45–49	53.5	31.0	94.6	0.4:1
50–54	60.8	27.8	96.5	0.4:1
55–59	69.4	24.9	98.4	0.3:1
60–64	77.5	22.6	99.7	0.3:1
65–69	82.5	21.2	99.9	0.3:1
70–74	87.0	20.1	99.9	0.3:1
75–79	91.6	19.1	100.0	0.2:1
80–84	96.0	18.3	100.0	0.2:1
85–89	97.5	18.0	100.0	0.2:1
90–94	99.3	17.7	100.0	0.2:1
95–100	100.0	17.5	100.0	0.2:1

$2.50/day 2005 PPP Poverty Line Tables

2005/6 Scorecard Applied to 2005/6 Validation Sample

Figure 6 ($2.50/day 2005 PPP 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	100.0
5–9	100.0
10–14	100.0
15–19	99.2
20–24	98.7
25–29	96.0
30–34	96.1
35–39	91.4
40–44	88.6
45–49	84.6
50–54	72.8
55–59	58.4
60–64	54.8
65–69	48.2
70–74	26.8
75–79	26.0
80–84	11.7
85–89	16.1
90–94	3.1
95–100	3.5

Figure 9 ($2.50/day 2005 PPP line): Bootstrapped differences between estimated and true household poverty likelihoods with confidence intervals in a large sample (n = 16,384), 2005/6 scorecard applied to the 2005/6 validation sample

	Difference between estimate and true value			
		Confidence interval (+/– percentage points)		
Score	Diff.	90-percent	95-percent	99-percent
0–4	+0.0	0.0	0.0	0.0
5–9	+0.0	0.0	0.0	0.0
10–14	+0.0	0.0	0.0	0.0
15–19	–0.7	0.4	0.4	0.4
20–24	+3.1	1.4	1.6	2.0
25–29	–0.5	1.1	1.3	1.8
30–34	+1.0	1.1	1.3	1.6
35–39	–0.2	1.3	1.5	2.0
40–44	+7.3	2.3	2.6	3.3
45–49	+3.0	1.8	2.3	2.9
50–54	+4.7	2.7	3.2	4.4
55–59	+0.8	2.4	3.0	3.7
60–64	–0.9	2.5	2.8	3.8
65–69	+10.3	3.1	3.7	4.9
70–74	–6.6	5.1	5.4	6.0
75–79	–2.8	3.1	3.9	4.8
80–84	+3.3	1.9	2.3	2.8
85–89	+0.2	4.4	5.1	6.6
90–94	+2.6	0.4	0.5	0.6
95–100	–13.5	10.3	10.9	12.3

Figure 11 ($2.50/day 2005 PPP line): Differences and precision of differences for bootstrapped estimates of poverty rates for groups of households at a point in time, by sample size, 2005/6 scorecard applied to the 2005/6 validation sample

Sample Size	Difference between estimate and true value			
		Confidence interval (+/− percentage points)		
n	Diff.	90-percent	95-percent	99-percent
1	+2.1	44.4	56.2	72.5
4	+1.6	36.3	42.7	55.5
8	+1.7	25.4	29.7	40.0
16	+1.9	19.0	22.7	29.4
32	+1.9	13.5	16.0	19.2
64	+1.6	9.2	11.4	15.6
128	+1.7	6.6	7.8	11.0
256	+1.6	4.8	5.6	7.4
512	+1.7	3.3	4.0	4.9
1,024	+1.7	2.3	2.7	3.5
2,048	+1.7	1.7	2.0	2.8
4,096	+1.7	1.2	1.4	1.9
8,192	+1.7	0.8	0.9	1.4
16,384	+1.7	0.6	0.7	0.9

Figure 13 ($2.50/day 2005 PPP line): Differences and precision of differences for bootstrapped estimates of changes in group's poverty rates between two points in time

This figure does not exist. It exists for the 2005/6 scorecard applied to the 2005/6 validation sample and the 2004/5 PSLM, and for the 2005/6 scorecard applied to the 2005/6 validation sample and the 2000/1 PIHS.

Figure 15 ($2.50/day 2005 PPP line): Households by targeting classification and score, along with "Total Accuracy" and BPAC, 2005/6 scorecard applied to the 2005/6 validation sample

Score	Inclusion: < poverty line correctly targeted	Undercoverage: < poverty line mistakenly non-targeted	Leakage: => poverty line mistakenly targeted	Exclusion: => poverty line correctly non-targeted	Total Accuracy Inclusion + Exclusion	BPAC See text
0–4	0.1	68.6	0.0	31.3	31.4	–99.6
5–9	0.4	68.3	0.0	31.3	31.7	–98.7
10–14	1.6	67.1	0.0	31.3	32.9	–95.2
15–19	4.0	64.7	0.0	31.3	35.3	–88.2
20–24	8.2	60.5	0.2	31.1	39.3	–75.8
25–29	15.3	53.4	0.4	30.9	46.2	–54.9
30–34	22.6	46.1	0.8	30.5	53.1	–33.0
35–39	31.8	36.9	1.5	29.7	61.6	–5.2
40–44	40.6	28.1	2.9	28.4	69.0	+22.4
45–49	48.9	19.8	4.5	26.7	75.7	+49.0
50–54	54.1	14.7	6.7	24.5	78.6	+67.2
55–59	59.2	9.6	10.3	21.0	80.2	+85.1
60–64	63.5	5.2	14.0	17.3	80.8	+79.7
65–69	65.4	3.3	17.1	14.2	79.6	+75.1
70–74	66.8	2.0	20.2	11.0	77.8	+70.6
75–79	68.0	0.7	23.6	7.6	75.6	+65.6
80–84	68.4	0.3	27.6	3.6	72.0	+59.8
85–89	68.6	0.1	28.9	2.3	71.0	+57.9
90–94	68.6	0.1	30.7	0.6	69.2	+55.4
95–100	68.7	0.0	31.3	0.0	68.7	+54.5

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

Figure 16 ($2.50/day 2005 PPP line): Households below the poverty line and all households at a given score or at or below a given score cut-off, 2005/6 scorecard applied to the 2005/6 validation sample

Targeting cut-off	% all households who are targeted	% targeted who are poor	% of poor who are targeted	Poor households targeted per non-poor household targeted
0–4	0.1	100.0	0.2	Only poor targeted
5–9	0.4	100.0	0.6	Only poor targeted
10–14	1.6	100.0	2.4	Only poor targeted
15–19	4.1	99.7	5.9	339.6:1
20–24	8.4	97.8	12.0	44.9:1
25–29	15.7	97.5	22.3	39.2:1
30–34	23.4	96.7	32.9	29.2:1
35–39	33.4	95.4	46.3	20.7:1
40–44	43.5	93.4	59.1	14.1:1
45–49	53.5	91.5	71.2	10.8:1
50–54	60.8	88.9	78.7	8.0:1
55–59	69.4	85.2	86.1	5.8:1
60–64	77.5	82.0	92.4	4.5:1
65–69	82.5	79.3	95.2	3.8:1
70–74	87.0	76.7	97.1	3.3:1
75–79	91.6	74.2	98.9	2.9:1
80–84	96.0	71.2	99.5	2.5:1
85–89	97.5	70.3	99.8	2.4:1
90–94	99.3	69.1	99.9	2.2:1
95–100	100.0	68.7	100.0	2.2:1

$3.75/day 2005 PPP Poverty Line Tables

2005/6 Scorecard Applied to 2005/6 Validation Sample

Figure 6 ($3.75/day 2005 PPP 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	100.0
5–9	100.0
10–14	100.0
15–19	99.6
20–24	99.4
25–29	100.0
30–34	99.8
35–39	98.5
40–44	98.8
45–49	97.0
50–54	94.7
55–59	91.4
60–64	83.9
65–69	81.2
70–74	67.1
75–79	51.6
80–84	45.9
85–89	50.8
90–94	23.6
95–100	27.7

Figure 9 ($3.75/day 2005 PPP line): Bootstrapped differences between estimated and true household poverty likelihoods with confidence intervals in a large sample (n = 16,384), 2005/6 scorecard applied to the 2005/6 validation sample

	Difference between estimate and true value			
		Confidence interval (+/– percentage points)		
Score	Diff.	90-percent	95-percent	99-percent
0–4	+0.0	0.0	0.0	0.0
5–9	+0.0	0.0	0.0	0.0
10–14	+0.0	0.0	0.0	0.0
15–19	–0.4	0.2	0.2	0.2
20–24	–0.3	0.3	0.3	0.3
25–29	+0.1	0.1	0.1	0.1
30–34	–0.1	0.1	0.1	0.2
35–39	–0.8	0.6	0.6	0.7
40–44	+0.2	0.5	0.6	0.7
45–49	+0.2	0.8	0.9	1.3
50–54	+0.5	1.2	1.4	1.8
55–59	+4.8	1.7	2.0	2.6
60–64	–2.1	1.9	2.1	2.8
65–69	+9.1	2.8	3.5	4.5
70–74	–3.9	3.4	3.7	4.8
75–79	–10.8	7.0	7.4	7.9
80–84	+4.2	3.3	4.0	5.0
85–89	+5.4	5.9	6.9	8.7
90–94	+13.6	3.2	3.6	4.6
95–100	+10.4	6.6	7.7	10.0

Figure 11 ($3.75/day 2005 PPP line): Differences and precision of differences for bootstrapped estimates of poverty rates for groups of households at a point in time, by sample size, 2005/6 scorecard applied to the 2005/6 validation sample

Sample Size	Difference between estimate and true value			
		Confidence interval (+/− percentage points)		
n	Diff.	90-percent	95-percent	99-percent
1	+1.6	39.8	47.1	60.7
4	+0.9	26.2	33.8	43.5
8	+0.6	19.2	23.6	30.7
16	+0.4	14.1	16.4	23.4
32	+0.6	10.1	11.5	15.4
64	+0.5	7.1	8.3	11.4
128	+0.6	5.1	6.0	8.2
256	+0.6	3.4	4.2	5.4
512	+0.5	2.4	2.9	3.9
1,024	+0.5	1.7	2.1	2.7
2,048	+0.5	1.2	1.5	1.9
4,096	+0.5	0.9	1.0	1.3
8,192	+0.5	0.6	0.8	0.9
16,384	+0.5	0.4	0.5	0.7

Figure 13 ($3.75/day 2005 PPP line): Differences and precision of differences for bootstrapped estimates of changes in group's poverty rates between two points in time

This figure does not exist. It exists for the 2005/6 scorecard applied to the 2005/6 validation sample and the 2004/5 PSLM, and for the 2005/6 scorecard applied to the 2005/6 validation sample and the 2000/1 PIHS.

Figure 15 ($3.75/day 2005 PPP line): Households by targeting classification and score, along with "Total Accuracy" and BPAC, 2005/6 scorecard applied to the 2005/6 validation sample

Score	Inclusion: < poverty line correctly targeted	Undercoverage: < poverty line mistakenly non-targeted	Leakage: => poverty line mistakenly targeted	Exclusion: => poverty line correctly non-targeted	Total Accuracy Inclusion + Exclusion	BPAC See text
0–4	0.1	86.4	0.0	13.5	13.6	–99.7
5–9	0.4	86.1	0.0	13.5	13.9	–99.0
10–14	1.6	84.9	0.0	13.5	15.1	–96.2
15–19	4.1	82.5	0.0	13.5	17.5	–90.6
20–24	8.4	78.1	0.0	13.5	21.9	–80.6
25–29	15.7	70.8	0.0	13.5	29.1	–63.8
30–34	23.4	63.1	0.1	13.4	36.8	–45.9
35–39	33.2	53.3	0.1	13.3	46.6	–23.0
40–44	43.2	43.3	0.3	13.2	56.4	+0.3
45–49	52.9	33.6	0.6	12.9	65.8	+23.0
50–54	59.8	26.7	1.0	12.5	72.3	+39.5
55–59	67.4	19.1	2.1	11.4	78.8	+58.2
60–64	74.2	12.3	3.3	10.2	84.4	+75.4
65–69	77.8	8.7	4.7	8.8	86.6	+85.3
70–74	80.8	5.7	6.2	7.3	88.2	+92.9
75–79	83.7	2.8	8.0	5.5	89.2	+90.8
80–84	85.6	0.9	10.4	3.1	88.7	+88.0
85–89	86.2	0.3	11.3	2.2	88.4	+86.9
90–94	86.4	0.1	12.9	0.6	87.0	+85.1
95–100	86.5	0.0	13.5	0.0	86.5	+84.4

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

Figure 16 ($3.75/day 2005 PPP line): Households below the poverty line and all households at a given score or at or below a given score cut-off, 2005/6 scorecard applied to the 2005/6 validation sample

Targeting cut-off	% all households who are targeted	% targeted who are poor	% of poor who are targeted	Poor households targeted per non-poor household targeted
0–4	0.1	100.0	0.2	Only poor targeted
5–9	0.4	100.0	0.5	Only poor targeted
10–14	1.6	100.0	1.9	Only poor targeted
15–19	4.1	100.0	4.7	Only poor targeted
20–24	8.4	99.7	9.7	372.0:1
25–29	15.7	99.8	18.1	431.5:1
30–34	23.4	99.7	27.0	386.3:1
35–39	33.4	99.6	38.4	231.1:1
40–44	43.5	99.3	50.0	151.5:1
45–49	53.5	98.9	61.2	93.5:1
50–54	60.8	98.4	69.2	60.3:1
55–59	69.4	97.0	77.9	32.7:1
60–64	77.5	95.8	85.8	22.6:1
65–69	82.5	94.3	89.9	16.5:1
70–74	87.0	92.9	93.4	13.1:1
75–79	91.6	91.3	96.8	10.5:1
80–84	96.0	89.2	99.0	8.2:1
85–89	97.5	88.4	99.6	7.6:1
90–94	99.3	87.0	99.9	6.7:1
95–100	100.0	86.5	100.0	6.4:1

100% National Poverty Line Tables

2006/5 Scorecard Applied to 2004/5 PSLM

Figure 9 (100% national line): Bootstrapped differences between estimated and true household poverty likelihoods with confidence intervals in a large sample (n = 16,384), 2005/6 scorecard applied to the 2004/5 PSLM

	Difference between estimate and true value			
		Confidence interval (+/– percentage points)		
Score	Diff.	90-percent	95-percent	99-percent
0–4	–4.6	2.3	2.3	2.3
5–9	–2.4	2.2	2.6	3.6
10–14	–6.2	4.6	4.9	5.5
15–19	+0.4	4.9	5.8	7.4
20–24	–1.0	3.5	4.2	5.6
25–29	+7.2	2.5	3.1	4.0
30–34	–11.3	7.1	7.4	7.9
35–39	+7.5	1.8	2.1	2.6
40–44	+0.2	1.5	1.8	2.5
45–49	+7.2	1.2	1.4	1.9
50–54	+1.0	1.7	2.0	2.7
55–59	+1.3	1.1	1.3	1.7
60–64	–1.3	1.3	1.6	2.1
65–69	–0.3	0.6	0.7	0.9
70–74	–0.8	0.8	0.8	1.1
75–79	+0.8	0.3	0.3	0.4
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

Figure 11 (100% national line): Differences and precision of differences for bootstrapped estimates of poverty rates for groups of households at a point in time, by sample size, 2005/6 scorecard applied to the 2004/5 PSLM

Sample Size	Difference between estimate and true value			
		Confidence interval (+/− percentage points)		
n	Diff.	90-percent	95-percent	99-percent
1	+2.4	41.2	52.7	65.4
4	+2.0	30.3	35.9	47.6
8	+1.8	20.2	24.4	31.8
16	+1.2	14.6	17.4	22.2
32	+1.0	10.1	12.0	15.8
64	+1.0	7.4	8.7	11.4
128	+1.2	5.2	6.3	8.3
256	+1.1	3.6	4.3	5.7
512	+1.0	2.5	3.1	4.0
1,024	+1.1	1.8	2.2	2.8
2,048	+1.1	1.3	1.5	2.1
4,096	+1.1	0.9	1.1	1.4
8,192	+1.1	0.7	0.8	1.0
16,384	+1.1	0.5	0.5	0.8

Figure 13 (100% national line): Differences and precision of differences for bootstrapped estimates of changes in group's poverty rates between two points in time, 2005/6 scorecard applied to the 2005/6 validation sample and the 2004/5 PSLM

Sample Size	Difference between estimate and true value			
		Confidence interval (+/– percentage points)		
n	Diff.	90-percent	95-percent	99-percent
1	–4.9	63.4	83.4	100.0
4	–4.3	44.9	55.6	70.5
8	–3.4	31.3	37.4	50.4
16	–2.7	22.5	27.6	35.7
32	–2.7	15.2	18.0	23.9
64	–2.6	11.7	13.7	18.6
128	–2.6	7.9	9.1	11.6
256	–2.6	5.7	6.5	8.3
512	–2.4	3.8	4.6	6.0
1,024	–2.5	2.7	3.2	4.3
2,048	–2.5	2.0	2.4	3.1
4,096	–2.5	1.5	1.7	2.2
8,192	–2.5	1.0	1.2	1.6
16,384	–2.5	0.7	0.8	1.2

Figure 15 (100% national line): Households by targeting classification and score, along with "Total Accuracy" and BPAC, 2005/6 scorecard applied to the 2004/5 PSLM

Score	Inclusion: < poverty line correctly targeted	Undercoverage: < poverty line mistakenly non-targeted	Leakage: => poverty line mistakenly targeted	Exclusion: => poverty line correctly non-targeted	Total Accuracy Inclusion + Exclusion	BPAC See text
0–4	0.1	19.5	0.0	80.3	80.5	–98.6
5–9	0.4	19.3	0.0	80.3	80.7	–95.8
10–14	1.4	18.3	0.2	80.1	81.5	–84.4
15–19	3.0	16.7	1.1	79.3	82.3	–64.2
20–24	5.5	14.2	2.9	77.4	82.9	–29.3
25–29	8.7	11.0	7.0	73.3	82.0	+23.9
30–34	12.2	7.5	11.2	69.1	81.3	+43.0
35–39	14.6	5.1	18.8	61.6	76.2	+4.7
40–44	16.7	3.0	26.8	53.5	70.2	–36.2
45–49	17.9	1.7	35.5	44.8	62.7	–80.6
50–54	18.6	1.1	42.3	38.1	56.6	–114.7
55–59	19.1	0.5	50.3	30.0	49.2	–155.6
60–64	19.5	0.2	58.0	22.4	41.9	–194.5
65–69	19.6	0.1	62.9	17.4	37.0	–219.8
70–74	19.6	0.0	67.4	13.0	32.6	–242.2
75–79	19.7	0.0	72.0	8.4	28.0	–265.7
80–84	19.7	0.0	76.3	4.0	23.7	–287.9
85–89	19.7	0.0	77.9	2.5	22.1	–295.6
90–94	19.7	0.0	79.6	0.7	20.4	–304.5
95–100	19.7	0.0	80.3	0.0	19.7	–308.1

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

Figure 16 (100% national line): Households below the poverty line and all households at a given score or at or below a given score cut-off, 2005/6 scorecard applied to the 2004/5 PSLM

Targeting cut-off	% all households who are targeted	% targeted who are poor	% of poor who are targeted	Poor households targeted per non-poor household targeted
0–4	0.1	100.0	0.7	Only poor targeted
5–9	0.4	92.9	2.0	13.1:1
10–14	1.6	86.7	7.2	6.5:1
15–19	4.1	74.1	15.2	2.9:1
20–24	8.4	65.2	27.9	1.9:1
25–29	15.7	55.3	44.1	1.2:1
30–34	23.4	52.1	62.0	1.1:1
35–39	33.4	43.8	74.2	0.8:1
40–44	43.5	38.4	84.9	0.6:1
45–49	53.5	33.6	91.2	0.5:1
50–54	60.8	30.5	94.4	0.4:1
55–59	69.4	27.6	97.3	0.4:1
60–64	77.5	25.2	99.2	0.3:1
65–69	82.5	23.7	99.5	0.3:1
70–74	87.0	22.6	99.8	0.3:1
75–79	91.6	21.5	100.0	0.3:1
80–84	96.0	20.5	100.0	0.3:1
85–89	97.5	20.2	100.0	0.3:1
90–94	99.3	19.8	100.0	0.2:1
95–100	100.0	19.7	100.0	0.2:1

50% National Poverty Line Tables

2005/6 Scorecard Applied to 2004/5 PSLM

Figure 9 (50% national line): Bootstrapped differences between estimated and true household poverty likelihoods with confidence intervals in a large sample (n = 16,384), 2005/6 scorecard applied to the 2004/5 PSLM

	Difference between estimate and true value			
		Confidence interval (+/− percentage points)		
Score	Diff.	90-percent	95-percent	99-percent
0–4	–0.0	0.1	0.1	0.1
5–9	–84.1	44.8	45.1	45.8
10–14	+5.7	2.1	2.5	3.4
15–19	+5.2	0.5	0.7	0.8
20–24	+2.0	0.4	0.5	0.7
25–29	+0.4	0.4	0.5	0.6
30–34	–0.4	0.4	0.5	0.6
35–39	+0.1	0.0	0.0	0.0
40–44	–0.0	0.1	0.1	0.1
45–49	+0.9	0.0	0.0	0.0
50–54	+0.0	0.0	0.0	0.0
55–59	+0.1	0.1	0.2	0.2
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

Figure 11 (50% national line): Differences and precision of differences for bootstrapped estimates of poverty rates for groups of households at a point in time, by sample size, 2005/6 scorecard applied to the 2004/5 PSLM

Sample Size	Difference between estimate and true value			
		Confidence interval (+/− percentage points)		
n	Diff.	90-percent	95-percent	99-percent
1	+0.4	1.3	1.8	3.3
4	+0.3	0.9	1.3	12.2
8	+0.2	0.7	1.0	8.0
16	+0.0	1.5	3.5	11.2
32	+0.0	1.7	5.2	6.5
64	+0.0	2.7	3.0	3.8
128	+0.0	1.5	1.8	2.8
256	+0.0	0.9	1.1	2.0
512	+0.0	0.8	0.9	1.2
1,024	+0.0	0.6	0.7	0.9
2,048	–0.0	0.4	0.5	0.7
4,096	–0.0	0.3	0.4	0.5
8,192	–0.0	0.2	0.3	0.3
16,384	–0.0	0.2	0.2	0.2

Figure 13 (50% national line): Differences and precision of differences for bootstrapped estimates of changes in group's poverty rates between two points in time, 2005/6 scorecard applied to the 2005/6 validation sample and the 2004/5 PSLM

Sample Size	Difference between estimate and true value			
		Confidence interval (+/– percentage points)		
n	Diff.	90-percent	95-percent	99-percent
1	–1.9	1.4	20.4	37.4
4	–1.7	9.3	14.4	25.1
8	–1.3	7.0	8.3	17.4
16	–0.8	4.5	7.6	16.4
32	–0.8	3.7	6.7	9.4
64	–0.7	3.3	4.8	5.9
128	–0.7	2.4	2.9	4.3
256	–0.7	1.5	1.9	2.8
512	–0.7	1.1	1.4	1.9
1,024	–0.7	0.8	1.0	1.4
2,048	–0.7	0.6	0.7	0.9
4,096	–0.7	0.4	0.5	0.7
8,192	–0.7	0.3	0.4	0.5
16,384	–0.6	0.2	0.2	0.3

Figure 15 (50% national line): Households by targeting classification and score, along with "Total Accuracy" and BPAC, 2005/6 scorecard applied to the 2004/5 PSLM

Score	Inclusion: < poverty line correctly targeted	Undercoverage: < poverty line mistakenly non-targeted	Leakage: => poverty line mistakenly targeted	Exclusion: => poverty line correctly non-targeted	Total Accuracy Inclusion + Exclusion	BPAC See text
0–4	0.0	0.4	0.1	99.5	99.5	–63.8
5–9	0.1	0.3	0.3	99.3	99.4	+18.4
10–14	0.2	0.2	1.5	98.1	98.3	–267.3
15–19	0.2	0.2	3.8	95.8	96.0	–870.2
20–24	0.2	0.1	8.2	91.4	91.7	–1,964.6
25–29	0.3	0.1	15.4	84.2	84.5	–3,789.9
30–34	0.4	0.0	23.1	76.6	76.9	–5,722.4
35–39	0.4	0.0	33.0	66.6	67.0	–8,233.5
40–44	0.4	0.0	43.1	56.5	56.8	–10,794.0
45–49	0.4	0.0	53.1	46.5	46.9	–13,313.3
50–54	0.4	0.0	60.5	39.2	39.5	–15,167.6
55–59	0.4	0.0	69.1	30.6	30.9	–17,340.3
60–64	0.4	0.0	77.1	22.5	22.9	–19,370.9
65–69	0.4	0.0	82.1	17.5	17.9	–20,640.6
70–74	0.4	0.0	86.6	13.0	13.4	–21,771.9
75–79	0.4	0.0	91.3	8.4	8.7	–22,946.7
80–84	0.4	0.0	95.6	4.0	4.4	–24,051.0
85–89	0.4	0.0	97.1	2.5	2.9	–24,433.9
90–94	0.4	0.0	98.9	0.7	1.1	–24,877.2
95–100	0.4	0.0	99.6	0.0	0.4	–25,056.3

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

Figure 16 (50% national line): Households below the poverty line and all households at a given score or at or below a given score cut-off, 2005/6 scorecard applied to the 2004/5 PSLM

Targeting cut-off	% all households who are targeted	% targeted who are poor	% of poor who are targeted	Poor households targeted per non-poor household targeted
0–4	0.1	1.3	0.4	0.0:1
5–9	0.4	25.0	27.2	0.3:1
10–14	1.6	11.4	47.1	0.1:1
15–19	4.1	5.2	52.9	0.1:1
20–24	8.4	2.9	62.2	0.0:1
25–29	15.7	1.9	74.0	0.0:1
30–34	23.4	1.6	91.9	0.0:1
35–39	33.4	1.1	91.9	0.0:1
40–44	43.5	0.9	95.3	0.0:1
45–49	53.5	0.7	95.3	0.0:1
50–54	60.8	0.6	95.3	0.0:1
55–59	69.4	0.6	100.0	0.0:1
60–64	77.5	0.5	100.0	0.0:1
65–69	82.5	0.5	100.0	0.0:1
70–74	87.0	0.5	100.0	0.0:1
75–79	91.6	0.4	100.0	0.0:1
80–84	96.0	0.4	100.0	0.0:1
85–89	97.5	0.4	100.0	0.0:1
90–94	99.3	0.4	100.0	0.0:1
95–100	100.0	0.4	100.0	0.0:1

75% National Poverty Line Tables

2005/6 Scorecard Applied to 2004/5 PSLM

Figure 9 (75% national line): Bootstrapped differences between estimated and true household poverty likelihoods with confidence intervals in a large sample (n = 16,384), 2005/6 scorecard applied to the 2004/5 PSLM

	Difference between estimate and true value			
		Confidence interval (+/− percentage points)		
Score	Diff.	90-percent	95-percent	99-percent
0–4	–26.2	13.1	13.1	13.1
5–9	–22.8	12.9	13.3	13.5
10–14	–27.4	16.7	17.3	18.4
15–19	+3.4	6.0	6.9	8.9
20–24	–5.5	4.6	4.9	5.7
25–29	+3.4	1.4	1.6	2.1
30–34	–1.1	1.4	1.7	2.2
35–39	+0.0	1.0	1.3	1.8
40–44	+1.3	0.4	0.5	0.6
45–49	+4.1	0.2	0.3	0.4
50–54	+0.5	0.3	0.4	0.5
55–59	+0.1	0.1	0.2	0.2
60–64	–2.1	1.6	1.7	1.9
65–69	+0.0	0.0	0.0	0.0
70–74	+0.4	0.0	0.0	0.0
75–79	–0.1	0.1	0.1	0.2
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

Figure 11 (75% national line): Differences and precision of differences for bootstrapped estimates of poverty rates for groups of households at a point in time, by sample size, 2005/6 scorecard applied to the 2004/5 PSLM

Sample Size	Difference between estimate and true value			
		Confidence interval (+/− percentage points)		
n	Diff.	90-percent	95-percent	99-percent
1	+0.7	22.9	33.5	49.0
4	–0.1	17.0	25.6	36.5
8	+0.0	11.5	15.6	23.2
16	–0.0	9.1	11.2	16.6
32	–0.1	6.4	7.6	10.2
64	+0.0	4.8	6.0	7.5
128	+0.0	3.4	4.0	5.4
256	+0.0	2.5	2.9	3.9
512	–0.0	1.7	2.0	2.6
1,024	–0.0	1.2	1.4	1.8
2,048	–0.0	0.8	1.0	1.3
4,096	–0.0	0.6	0.7	0.9
8,192	–0.0	0.4	0.5	0.6
16,384	–0.0	0.3	0.4	0.4

Figure 13 (75% national line): Differences and precision of differences for bootstrapped estimates of changes in group's poverty rates between two points in time, 2005/6 scorecard applied to the 2005/6 validation sample and the 2004/5 PSLM

Sample Size	Difference between estimate and true value			
		Confidence interval (+/– percentage points)		
n	Diff.	90-percent	95-percent	99-percent
1	–3.9	42.7	59.5	85.4
4	–2.5	30.4	38.9	56.0
8	–2.4	19.9	25.1	34.8
16	–2.2	13.8	16.3	24.6
32	–2.2	9.7	11.9	16.4
64	–2.3	7.0	8.6	11.7
128	–2.3	5.2	6.0	8.0
256	–2.3	3.7	4.4	5.5
512	–2.2	2.4	2.9	3.7
1,024	–2.2	1.7	2.1	2.6
2,048	–2.3	1.2	1.5	2.0
4,096	–2.3	0.8	1.0	1.4
8,192	–2.2	0.6	0.8	1.0
16,384	–2.2	0.4	0.5	0.7

Figure 15 (75% national line): Households by targeting classification and score, along with "Total Accuracy" and BPAC, 2005/6 scorecard applied to the 2004/5 PSLM

Score	Inclusion: < poverty line correctly targeted	Undercoverage: < poverty line mistakenly non-targeted	Leakage: => poverty line mistakenly targeted	Exclusion: => poverty line correctly non-targeted	Total Accuracy Inclusion + Exclusion	BPAC See text
0–4	0.1	5.0	0.0	94.8	95.0	–94.5
5–9	0.3	4.8	0.1	94.8	95.1	–84.9
10–14	0.9	4.2	0.7	94.1	95.1	–50.0
15–19	1.5	3.6	2.5	92.3	93.9	+8.3
20–24	2.5	2.7	6.0	88.9	91.3	–15.4
25–29	3.3	1.9	12.4	82.4	85.7	–140.7
30–34	4.1	1.1	19.3	75.5	79.6	–274.3
35–39	4.7	0.5	28.7	66.1	70.8	–455.5
40–44	4.9	0.3	38.7	56.2	61.0	–648.6
45–49	4.9	0.2	48.5	46.3	51.2	–839.9
50–54	5.0	0.1	55.8	39.0	44.1	–980.5
55–59	5.1	0.1	64.4	30.4	35.5	–1,146.8
60–64	5.2	0.0	72.3	22.5	27.6	–1,300.7
65–69	5.2	0.0	77.4	17.5	22.6	–1,398.0
70–74	5.2	0.0	81.8	13.0	18.1	–1,484.8
75–79	5.2	0.0	86.5	8.4	13.5	–1,574.6
80–84	5.2	0.0	90.9	4.0	9.1	–1,659.3
85–89	5.2	0.0	92.4	2.5	7.6	–1,688.6
90–94	5.2	0.0	94.1	0.7	5.9	–1,722.6
95–100	5.2	0.0	94.8	0.0	5.2	–1,736.4

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

Figure 16 (75% national line): Households below the poverty line and all households at a given score or at or below a given score cut-off, 2005/6 scorecard applied to the 2004/5 PSLM

Targeting cut-off	% all households who are targeted	% targeted who are poor	% of poor who are targeted	Poor households targeted per non-poor household targeted
0–4	0.1	99.2	2.7	124.8:1
5–9	0.4	81.1	6.8	4.3:1
10–14	1.6	57.5	18.3	1.4:1
15–19	4.1	38.1	29.9	0.6:1
20–24	8.4	29.2	47.7	0.4:1
25–29	15.7	20.8	63.2	0.3:1
30–34	23.4	17.4	79.1	0.2:1
35–39	33.4	14.0	90.5	0.2:1
40–44	43.5	11.2	94.0	0.1:1
45–49	53.5	9.2	95.7	0.1:1
50–54	60.8	8.3	97.4	0.1:1
55–59	69.4	7.3	97.9	0.1:1
60–64	77.5	6.6	99.7	0.1:1
65–69	82.5	6.2	99.8	0.1:1
70–74	87.0	5.9	99.8	0.1:1
75–79	91.6	5.6	100.0	0.1:1
80–84	96.0	5.4	100.0	0.1:1
85–89	97.5	5.3	100.0	0.1:1
90–94	99.3	5.2	100.0	0.1:1
95–100	100.0	5.2	100.0	0.1:1

125% National Poverty Line Tables

2005/6 Scorecard Applied to 2004/5 PSLM

Figure 9 (125% national line): Bootstrapped differences between estimated and true household poverty likelihoods with confidence intervals in a large sample (n = 16,384), 2005/6 scorecard applied to the 2004/5 PSLM

	Difference between estimate and true value			
		Confidence interval (+/− percentage points)		
Score	Diff.	90-percent	95-percent	99-percent
0–4	–4.6	2.3	2.3	2.3
5–9	–2.1	1.1	1.1	1.1
10–14	+0.1	2.8	3.3	4.4
15–19	+11.6	4.4	5.2	7.2
20–24	–3.6	3.2	3.5	4.4
25–29	+7.9	2.5	2.9	3.6
30–34	–4.6	3.5	3.7	4.4
35–39	+5.1	2.3	2.7	3.6
40–44	+0.7	2.2	2.6	3.3
45–49	+5.6	2.1	2.4	3.3
50–54	+3.0	2.4	2.9	4.0
55–59	–1.2	1.9	2.2	2.9
60–64	+1.5	1.8	2.2	2.8
65–69	+1.1	1.5	1.8	2.4
70–74	+0.1	1.3	1.5	2.0
75–79	–6.0	4.1	4.3	4.8
80–84	–1.5	1.5	1.8	2.4
85–89	+0.0	0.0	0.0	0.0
90–94	+0.9	0.0	0.0	0.0
95–100	+0.0	0.0	0.0	0.0

Figure 11 (125% national line): Differences and precision of differences for bootstrapped estimates of poverty rates for groups of households at a point in time, by sample size, 2005/6 scorecard applied to the 2004/5 PSLM

Sample Size	Difference between estimate and true value			
		Confidence interval (+/− percentage points)		
n	Diff.	90-percent	95-percent	99-percent
1	+1.7	49.5	56.8	75.1
4	+1.8	37.1	44.0	54.8
8	+1.9	26.4	31.4	41.6
16	+1.3	18.1	22.1	30.0
32	+1.3	12.4	15.0	20.1
64	+1.4	9.1	10.8	14.0
128	+1.4	6.7	7.7	10.1
256	+1.4	4.5	5.5	7.1
512	+1.3	3.2	3.8	4.8
1,024	+1.4	2.3	2.7	3.3
2,048	+1.4	1.6	1.9	2.5
4,096	+1.3	1.2	1.4	1.7
8,192	+1.3	0.8	1.0	1.3
16,384	+1.3	0.6	0.6	0.9

Figure 13 (125% national line): Differences and precision of differences for bootstrapped estimates of changes in group's poverty rates between two points in time, 2005/6 scorecard applied to the 2005/6 validation sample and the 2004/5 PSLM

Sample Size	Difference between estimate and true value			
		Confidence interval (+/– percentage points)		
n	Diff.	90-percent	95-percent	99-percent
1	–1.9	69.8	93.6	106.4
4	–2.4	53.9	63.1	85.0
8	–1.7	39.1	45.1	59.7
16	–0.8	26.4	32.4	44.5
32	–1.0	19.2	23.1	29.3
64	–1.1	13.7	16.2	21.7
128	–1.0	9.8	11.5	15.0
256	–1.2	6.8	8.3	11.0
512	–1.1	4.6	5.4	7.6
1,024	–1.2	3.4	4.0	5.1
2,048	–1.2	2.4	2.8	3.6
4,096	–1.1	1.8	2.0	2.6
8,192	–1.1	1.2	1.4	2.0
16,384	–1.1	0.9	1.0	1.4

Figure 15 (125% national line): Households by targeting classification and score, along with "Total Accuracy" and BPAC, 2005/6 scorecard applied to the 2004/5 PSLM

Score	Inclusion: < poverty line correctly targeted	Undercoverage: < poverty line mistakenly non-targeted	Leakage: => poverty line mistakenly targeted	Exclusion: => poverty line correctly non-targeted	Total Accuracy Inclusion + Exclusion	BPAC See text
0–4	0.1	37.3	0.0	62.6	62.7	–99.2
5–9	0.4	37.0	0.0	62.6	63.0	–97.7
10–14	1.6	35.9	0.1	62.5	64.0	–91.5
15–19	3.5	33.9	0.5	62.1	65.6	–79.7
20–24	7.1	30.4	1.4	61.2	68.3	–58.7
25–29	12.2	25.3	3.5	59.1	71.2	–25.5
30–34	17.6	19.9	5.9	56.7	74.3	+9.5
35–39	22.9	14.5	10.5	52.1	75.0	+50.3
40–44	27.6	9.8	15.9	46.7	74.3	+57.5
45–49	31.3	6.1	22.2	40.4	71.7	+40.7
50–54	33.4	4.0	27.4	35.1	68.5	+26.7
55–59	35.2	2.2	34.2	28.4	63.6	+8.5
60–64	36.3	1.1	41.2	21.4	57.8	–10.0
65–69	36.7	0.7	45.8	16.8	53.5	–22.3
70–74	37.0	0.5	50.0	12.5	49.5	–33.7
75–79	37.3	0.1	54.4	8.2	45.5	–45.2
80–84	37.4	0.0	58.6	4.0	41.4	–56.6
85–89	37.4	0.0	60.1	2.5	39.9	–60.6
90–94	37.4	0.0	61.9	0.7	38.1	–65.3
95–100	37.4	0.0	62.6	0.0	37.4	–67.2

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

Figure 16 (125% national line): Households below the poverty line and all households at a given score or at or below a given score cut-off, 2005/6 scorecard applied to the 2004/5 PSLM

Targeting cut-off	% all households who are targeted	% targeted who are poor	% of poor who are targeted	Poor households targeted per non-poor household targeted
0–4	0.1	100.0	0.4	Only poor targeted
5–9	0.4	99.5	1.1	221.1:1
10–14	1.6	94.8	4.2	18.1:1
15–19	4.1	87.2	9.4	6.8:1
20–24	8.4	83.7	18.8	5.1:1
25–29	15.7	77.5	32.5	3.5:1
30–34	23.4	75.0	46.9	3.0:1
35–39	33.4	68.6	61.2	2.2:1
40–44	43.5	63.4	73.7	1.7:1
45–49	53.5	58.5	83.7	1.4:1
50–54	60.8	54.9	89.2	1.2:1
55–59	69.4	50.7	94.1	1.0:1
60–64	77.5	46.9	97.1	0.9:1
65–69	82.5	44.5	98.2	0.8:1
70–74	87.0	42.5	98.8	0.7:1
75–79	91.6	40.7	99.7	0.7:1
80–84	96.0	39.0	100.0	0.6:1
85–89	97.5	38.4	100.0	0.6:1
90–94	99.3	37.7	100.0	0.6:1
95–100	100.0	37.4	100.0	0.6:1

200% National Poverty Line Tables

2005/6 Scorecard Applied to 2004/5 PSLM

Figure 9 (200% national line): Bootstrapped differences between estimated and true household poverty likelihoods with confidence intervals in a large sample (n = 16,384), 2005/6 scorecard applied to the 2004/5 PSLM

	Difference between estimate and true value			
		Confidence interval (+/– percentage points)		
Score	Diff.	90-percent	95-percent	99-percent
0–4	+0.0	0.0	0.0	0.0
5–9	+0.0	0.0	0.0	0.0
10–14	+0.0	0.0	0.0	0.0
15–19	–0.3	0.2	0.2	0.3
20–24	+3.6	1.4	1.6	2.1
25–29	+1.8	1.2	1.4	2.0
30–34	+1.9	1.1	1.3	1.6
35–39	–2.2	1.6	1.7	1.9
40–44	+0.6	1.3	1.6	2.1
45–49	+3.6	1.8	2.2	2.8
50–54	+6.2	2.6	3.2	4.0
55–59	+1.5	2.4	2.9	3.7
60–64	+3.1	2.5	2.9	3.8
65–69	+16.4	3.2	3.8	4.8
70–74	–9.5	6.6	6.9	7.4
75–79	+1.2	3.1	3.8	4.9
80–84	+0.2	2.5	3.1	4.1
85–89	+1.2	4.6	5.3	7.8
90–94	+11.4	1.7	2.0	2.7
95–100	–13.5	10.3	10.9	12.3

Figure 11 (200% national line): Differences and precision of differences for bootstrapped estimates of poverty rates for groups of households at a point in time, by sample size, 2005/6 scorecard applied to the 2004/5 PSLM

Sample Size	Difference between estimate and true value			
		Confidence interval (+/− percentage points)		
n	Diff.	90-percent	95-percent	99-percent
1	+2.9	42.5	54.8	73.4
4	+2.2	34.1	41.8	55.7
8	+2.2	24.4	28.9	38.8
16	+2.2	18.1	21.4	27.8
32	+2.1	12.9	15.0	19.9
64	+1.9	9.2	10.8	14.1
128	+1.9	6.4	7.8	10.7
256	+1.9	4.6	5.5	7.1
512	+2.0	3.1	3.8	4.7
1,024	+2.0	2.2	2.5	3.3
2,048	+2.0	1.7	2.0	2.6
4,096	+2.0	1.1	1.3	1.9
8,192	+2.0	0.8	0.9	1.3
16,384	+2.0	0.6	0.7	0.9

Figure 13 (200% national line): Differences and precision of differences for bootstrapped estimates of changes in group's poverty rates between two points in time, 2005/6 scorecard applied to the 2005/6 validation sample and the 2004/5 PSLM

Sample Size	Difference between estimate and true value			
		Confidence interval (+/− percentage points)		
n	Diff.	90-percent	95-percent	99-percent
1	+3.6	70.8	87.7	106.8
4	+4.1	49.0	58.0	77.6
8	+3.9	34.5	39.7	55.9
16	+3.6	25.4	29.9	39.3
32	+3.7	18.6	21.9	29.5
64	+3.9	13.6	16.1	21.0
128	+3.9	9.6	11.3	13.6
256	+3.9	6.4	7.6	10.2
512	+3.8	4.5	5.4	6.8
1,024	+3.7	3.2	3.9	5.1
2,048	+3.7	2.4	2.8	3.8
4,096	+3.7	1.6	2.0	2.7
8,192	+3.7	1.2	1.4	1.8
16,384	+3.7	0.9	1.0	1.3

Figure 15 (200% national line): Households by targeting classification and score, along with "Total Accuracy" and BPAC, 2005/6 scorecard applied to the 2004/5 PSLM

Score	Inclusion: < poverty line correctly targeted	Undercoverage: < poverty line mistakenly non-targeted	Leakage: => poverty line mistakenly targeted	Exclusion: => poverty line correctly non-targeted	Total Accuracy Inclusion + Exclusion	BPAC See text
0–4	0.1	72.1	0.0	27.7	27.9	–99.6
5–9	0.4	71.9	0.0	27.7	28.1	–98.8
10–14	1.6	70.6	0.0	27.7	29.4	–95.5
15–19	4.0	68.2	0.0	27.7	31.7	–88.8
20–24	8.2	64.0	0.2	27.5	35.8	–76.9
25–29	15.3	57.0	0.4	27.3	42.5	–57.2
30–34	22.6	49.7	0.8	26.9	49.6	–36.3
35–39	32.0	40.3	1.4	26.3	58.3	–9.6
40–44	41.1	31.2	2.4	25.3	66.4	+17.1
45–49	49.7	22.6	3.8	23.9	73.6	+42.8
50–54	55.3	17.0	5.6	22.2	77.4	+60.6
55–59	61.0	11.2	8.4	19.3	80.4	+80.5
60–64	66.0	6.3	11.5	16.2	82.1	+84.0
65–69	68.1	4.2	14.5	13.3	81.3	+80.0
70–74	69.8	2.5	17.2	10.5	80.3	+76.2
75–79	71.2	1.1	20.5	7.2	78.4	+71.7
80–84	71.8	0.4	24.2	3.5	75.4	+66.5
85–89	72.1	0.2	25.4	2.3	74.4	+64.8
90–94	72.2	0.1	27.1	0.6	72.8	+62.5
95–100	72.3	0.0	27.7	0.0	72.3	+61.7

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

Figure 16 (200% national line): Households below the poverty line and all households at a given score or at or below a given score cut-off, 2005/6 scorecard applied to the 2004/5 PSLM

Targeting cut-off	% all households who are targeted	% targeted who are poor	% of poor who are targeted	Poor households targeted per non-poor household targeted
0–4	0.1	100.0	0.2	Only poor targeted
5–9	0.4	100.0	0.6	Only poor targeted
10–14	1.6	100.0	2.3	Only poor targeted
15–19	4.1	99.7	5.6	339.6:1
20–24	8.4	97.9	11.4	45.8:1
25–29	15.7	97.3	21.1	35.4:1
30–34	23.4	96.6	31.3	28.8:1
35–39	33.4	95.9	44.3	23.4:1
40–44	43.5	94.5	56.9	17.2:1
45–49	53.5	92.9	68.8	13.1:1
50–54	60.8	90.9	76.5	9.9:1
55–59	69.4	87.9	84.5	7.3:1
60–64	77.5	85.1	91.2	5.7:1
65–69	82.5	82.5	94.1	4.7:1
70–74	87.0	80.2	96.6	4.1:1
75–79	91.6	77.6	98.4	3.5:1
80–84	96.0	74.8	99.4	3.0:1
85–89	97.5	73.9	99.8	2.8:1
90–94	99.3	72.7	99.9	2.7:1
95–100	100.0	72.3	100.0	2.6:1

USAID "Extreme" Poverty Line Tables

2005/6 Scorecard Applied to 2004/5 PSLM

Figure 9 (USAID "extreme" line): Bootstrapped differences between estimated and true household poverty likelihoods with confidence intervals in a large sample (n = 16,384), 2005/6 scorecard applied to the 2004/5 PSLM

	Difference between estimate and true value			
		Confidence interval (+/– percentage points)		
Score	Diff.	90-percent	95-percent	99-percent
0–4	+71.3	1.4	1.7	2.4
5–9	–25.6	14.3	14.6	14.9
10–14	–21.4	13.3	13.8	14.5
15–19	–2.6	5.5	6.5	8.1
20–24	–4.8	4.2	4.6	5.9
25–29	+5.8	1.9	2.3	3.2
30–34	–1.9	1.9	2.3	3.0
35–39	+0.1	1.5	1.7	2.2
40–44	+0.2	1.0	1.2	1.7
45–49	+4.3	0.7	0.9	1.1
50–54	+1.1	0.9	1.1	1.3
55–59	+1.3	0.5	0.6	0.8
60–64	–1.6	1.3	1.4	1.6
65–69	–0.5	0.6	0.6	0.8
70–74	+0.0	0.0	0.0	0.0
75–79	–0.1	0.1	0.1	0.2
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

Figure 11 (USAID "extreme" line): Differences and precision of differences for bootstrapped estimates of poverty rates for groups of households at a point in time, by sample size, 2005/6 scorecard applied to the 2004/5 PSLM

Sample Size	Difference between estimate and true value			
		Confidence interval (+/− percentage points)		
n	Diff.	90-percent	95-percent	99-percent
1	+0.9	33.1	43.4	61.3
4	+0.2	23.1	29.0	42.3
8	+0.1	15.9	19.5	27.6
16	+0.2	11.3	14.3	22.5
32	+0.2	8.0	9.6	13.5
64	+0.4	5.7	7.1	9.4
128	+0.5	4.3	5.3	6.4
256	+0.5	3.0	3.6	5.1
512	+0.4	2.1	2.6	3.4
1,024	+0.5	1.5	1.8	2.3
2,048	+0.5	1.1	1.3	1.7
4,096	+0.5	0.7	0.9	1.1
8,192	+0.4	0.5	0.7	0.8
16,384	+0.5	0.4	0.4	0.6

Figure 13 (USAID "extreme" line): Differences and precision of differences for bootstrapped estimates of changes in group's poverty rates between two points in time, 2005/6 scorecard applied to the 2005/6 validation sample and the 2004/5 PSLM

Sample Size	Difference between estimate and true value			
		Confidence interval (+/– percentage points)		
n	Diff.	90-percent	95-percent	99-percent
1	–4.5	52.3	65.5	97.5
4	–2.7	35.9	45.7	64.5
8	–1.8	23.8	29.8	39.5
16	–1.6	16.8	21.2	27.5
32	–1.5	12.0	14.1	18.6
64	–1.6	8.5	10.3	13.3
128	–1.7	6.2	7.2	9.3
256	–1.7	4.3	5.1	6.3
512	–1.7	3.1	3.6	5.0
1,024	–1.7	2.2	2.6	3.2
2,048	–1.7	1.6	1.9	2.4
4,096	–1.7	1.1	1.3	1.8
8,192	–1.6	0.8	0.9	1.2
16,384	–1.6	0.5	0.6	0.8

Figure 15 (USAID "extreme" line): Households by targeting classification and score, along with "Total Accuracy" and BPAC, 2005/6 scorecard applied to the 2004/5 PSLM

Score	Inclusion: < poverty line correctly targeted	Undercoverage: < poverty line mistakenly non-targeted	Leakage: => poverty line mistakenly targeted	Exclusion: => poverty line correctly non-targeted	Total Accuracy Inclusion + Exclusion	BPAC See text
0–4	0.0	9.7	0.1	90.1	90.2	–98.2
5–9	0.2	9.5	0.2	90.1	90.3	–93.1
10–14	1.0	8.7	0.6	89.6	90.6	–72.9
15–19	1.9	7.8	2.1	88.1	90.1	–38.7
20–24	3.5	6.2	4.9	85.3	88.9	+22.5
25–29	5.2	4.6	10.5	79.7	84.9	–8.2
30–34	6.7	3.1	16.8	73.5	80.2	–72.0
35–39	8.0	1.8	25.4	64.9	72.9	–160.5
40–44	8.7	1.0	34.8	55.5	64.2	–257.1
45–49	9.2	0.5	44.3	46.0	55.2	–354.5
50–54	9.4	0.3	51.4	38.9	48.3	–427.6
55–59	9.6	0.2	59.9	30.4	40.0	–514.5
60–64	9.7	0.1	67.8	22.5	32.1	–596.1
65–69	9.7	0.0	72.8	17.5	27.2	–647.2
70–74	9.7	0.0	77.3	13.0	22.7	–693.2
75–79	9.7	0.0	81.9	8.4	18.1	–740.8
80–84	9.7	0.0	86.3	4.0	13.7	–785.7
85–89	9.7	0.0	87.8	2.5	12.2	–801.2
90–94	9.7	0.0	89.5	0.7	10.5	–819.3
95–100	9.7	0.0	90.3	0.0	9.7	–826.5

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

Figure 16 (USAID "extreme" line): Households below the poverty line and all households at a given score or at or below a given score cut-off, 2005/6 scorecard applied to the 2004/5 PSLM

Targeting cut-off	% all households who are targeted	% targeted who are poor	% of poor who are targeted	Poor households targeted per non-poor household targeted
0–4	0.1	21.9	0.3	0.3:1
5–9	0.4	55.6	2.5	1.3:1
10–14	1.6	60.6	10.2	1.5:1
15–19	4.1	47.4	19.7	0.9:1
20–24	8.4	41.7	36.0	0.7:1
25–29	15.7	32.9	53.0	0.5:1
30–34	23.4	28.4	68.3	0.4:1
35–39	33.4	23.9	81.9	0.3:1
40–44	43.5	20.1	89.6	0.3:1
45–49	53.5	17.2	94.6	0.2:1
50–54	60.8	15.5	96.8	0.2:1
55–59	69.4	13.8	98.4	0.2:1
60–64	77.5	12.5	99.4	0.1:1
65–69	82.5	11.8	99.9	0.1:1
70–74	87.0	11.2	99.9	0.1:1
75–79	91.6	10.6	100.0	0.1:1
80–84	96.0	10.1	100.0	0.1:1
85–89	97.5	10.0	100.0	0.1:1
90–94	99.3	9.8	100.0	0.1:1
95–100	100.0	9.7	100.0	0.1:1

$1.25/day 2005 PPP Poverty Line Tables

2005/6 Scorecard Applied to 2004/5 PSLM

Figure 9 ($1.25/day 2005 PPP line): Bootstrapped differences between estimated and true household poverty likelihoods with confidence intervals in a large sample (n = 16,384), 2005/6 scorecard applied to the 2004/5 PSLM

	Difference between estimate and true value			
		Confidence interval (+/– percentage points)		
Score	Diff.	90-percent	95-percent	99-percent
0–4	–4.6	2.3	2.3	2.3
5–9	–2.4	2.3	2.7	3.6
10–14	–11.1	7.1	7.4	7.9
15–19	+2.9	5.0	5.8	7.6
20–24	+0.6	3.7	4.3	5.6
25–29	+7.9	2.5	3.1	4.1
30–34	–13.2	8.1	8.4	9.0
35–39	+7.5	1.7	2.1	2.6
40–44	–1.5	1.5	1.7	2.4
45–49	+4.7	1.0	1.2	1.6
50–54	+2.7	1.1	1.3	1.7
55–59	+0.5	0.8	1.0	1.3
60–64	–3.2	2.2	2.4	2.7
65–69	–0.1	0.5	0.7	0.8
70–74	+0.4	0.0	0.0	0.0
75–79	+0.7	0.1	0.1	0.2
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

Figure 11 ($1.25/day 2005 PPP line): Differences and precision of differences for bootstrapped estimates of poverty rates for groups of households at a point in time, by sample size, 2005/6 scorecard applied to the 2004/5 PSLM

Sample Size	Difference between estimate and true value			
		Confidence interval (+/− percentage points)		
n	Diff.	90-percent	95-percent	99-percent
1	+1.5	39.7	48.5	65.6
4	+1.2	28.5	34.7	47.3
8	+0.9	18.8	22.5	31.4
16	+0.4	13.9	16.7	21.2
32	+0.3	9.5	11.8	15.2
64	+0.4	7.1	8.1	11.0
128	+0.6	5.0	6.1	8.1
256	+0.6	3.6	4.2	5.5
512	+0.5	2.5	3.0	4.2
1,024	+0.6	1.8	2.2	2.7
2,048	+0.6	1.3	1.6	2.0
4,096	+0.6	0.9	1.1	1.3
8,192	+0.6	0.7	0.8	1.0
16,384	+0.6	0.5	0.5	0.7

Figure 13 ($1.25/day 2005 PPP line): Differences and precision of differences for bootstrapped estimates of changes in group's poverty rates between two points in time, 2005/6 scorecard applied to the 2005/6 validation sample and the 2004/5 PSLM

Sample Size	Difference between estimate and true value			
		Confidence interval (+/– percentage points)		
n	Diff.	90-percent	95-percent	99-percent
1	–4.2	59.8	74.5	102.1
4	–3.1	40.6	51.8	68.5
8	–2.2	29.1	34.9	46.0
16	–1.8	21.5	25.6	32.9
32	–1.8	13.8	16.7	22.5
64	–2.0	10.8	12.6	17.1
128	–2.0	7.5	8.6	11.5
256	–2.0	5.2	6.1	8.0
512	–1.9	3.8	4.5	5.8
1,024	–1.9	2.7	3.1	4.2
2,048	–2.0	1.9	2.4	3.1
4,096	–2.0	1.3	1.6	2.0
8,192	–2.0	0.9	1.1	1.6
16,384	–2.0	0.7	0.8	1.1

Figure 15 ($1.25/day 2005 PPP line): Households by targeting classification and score, along with "Total Accuracy" and BPAC, 2005/6 scorecard applied to the 2004/5 PSLM

Score	Inclusion: < poverty line correctly targeted	Undercoverage: < poverty line mistakenly non-targeted	Leakage: => poverty line mistakenly targeted	Exclusion: => poverty line correctly non-targeted	Total Accuracy Inclusion + Exclusion	BPAC See text
0–4	0.1	17.4	0.0	82.5	82.6	–98.4
5–9	0.4	17.1	0.0	82.4	82.8	–95.3
10–14	1.4	16.1	0.2	82.2	83.7	–82.5
15–19	2.9	14.6	1.1	81.3	84.2	–60.3
20–24	5.3	12.2	3.1	79.4	84.7	–21.7
25–29	8.4	9.2	7.3	75.1	83.5	+37.2
30–34	11.8	5.8	11.6	70.8	82.6	+33.6
35–39	13.8	3.7	19.5	62.9	76.8	–11.3
40–44	15.6	1.9	27.9	54.6	70.3	–58.9
45–49	16.6	0.9	36.9	45.6	62.1	–110.4
50–54	16.9	0.6	43.9	38.6	55.5	–150.4
55–59	17.3	0.3	52.2	30.3	47.5	–197.6
60–64	17.5	0.1	60.0	22.5	39.9	–242.2
65–69	17.5	0.0	65.0	17.5	35.0	–270.7
70–74	17.5	0.0	69.5	13.0	30.5	–296.2
75–79	17.5	0.0	74.1	8.4	25.9	–322.7
80–84	17.5	0.0	78.5	4.0	21.5	–347.6
85–89	17.5	0.0	80.0	2.5	20.0	–356.2
90–94	17.5	0.0	81.8	0.7	18.2	–366.2
95–100	17.5	0.0	82.5	0.0	17.5	–370.3

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

Figure 16 ($1.25/day 2005 PPP line): Households below the poverty line and all households at a given score or at or below a given score cut-off, 2005/6 scorecard applied to the 2004/5 PSLM

Targeting cut-off	% all households who are targeted	% targeted who are poor	% of poor who are targeted	Poor households targeted per non-poor household targeted
0–4	0.1	100.0	0.8	Only poor targeted
5–9	0.4	92.1	2.3	11.7:1
10–14	1.6	86.5	8.1	6.4:1
15–19	4.1	71.9	16.6	2.6:1
20–24	8.4	63.0	30.3	1.7:1
25–29	15.7	53.3	47.7	1.1:1
30–34	23.4	50.3	67.1	1.0:1
35–39	33.4	41.5	78.9	0.7:1
40–44	43.5	36.0	89.2	0.6:1
45–49	53.5	31.0	94.6	0.4:1
50–54	60.8	27.8	96.5	0.4:1
55–59	69.4	24.9	98.4	0.3:1
60–64	77.5	22.6	99.7	0.3:1
65–69	82.5	21.2	99.9	0.3:1
70–74	87.0	20.1	99.9	0.3:1
75–79	91.6	19.1	100.0	0.2:1
80–84	96.0	18.3	100.0	0.2:1
85–89	97.5	18.0	100.0	0.2:1
90–94	99.3	17.7	100.0	0.2:1
95–100	100.0	17.5	100.0	0.2:1

$2.50/day 2005 PPP Poverty Line Tables

2005/6 Scorecard Applied to 2004/5 PSLM

Figure 9 ($2.50/day 2005 PPP line): Bootstrapped differences between estimated and true household poverty likelihoods with confidence intervals in a large sample (n = 16,384), 2005/6 scorecard applied to the 2004/5 PSLM

	Difference between estimate and true value			
		Confidence interval (+/– percentage points)		
Score	Diff.	90-percent	95-percent	99-percent
0–4	+0.0	0.0	0.0	0.0
5–9	+0.0	0.0	0.0	0.0
10–14	+0.0	0.0	0.0	0.0
15–19	–0.7	0.4	0.4	0.4
20–24	+3.1	1.4	1.6	2.0
25–29	–0.5	1.1	1.3	1.8
30–34	+1.0	1.1	1.3	1.6
35–39	–0.2	1.3	1.5	2.0
40–44	+7.3	2.3	2.6	3.3
45–49	+3.0	1.8	2.3	2.9
50–54	+4.7	2.7	3.2	4.4
55–59	+0.8	2.4	3.0	3.7
60–64	–0.9	2.5	2.8	3.8
65–69	+10.3	3.1	3.7	4.9
70–74	–6.6	5.1	5.4	6.0
75–79	–2.8	3.1	3.9	4.8
80–84	+3.3	1.9	2.3	2.8
85–89	+0.2	4.4	5.1	6.6
90–94	+2.6	0.4	0.5	0.6
95–100	–13.5	10.3	10.9	12.3

Figure 11 ($2.50/day 2005 PPP line): Differences and precision of differences for bootstrapped estimates of poverty rates for groups of households at a point in time, by sample size, 2005/6 scorecard applied to the 2004/5 PSLM

Sample Size	Difference between estimate and true value			
		Confidence interval (+/− percentage points)		
n	Diff.	90-percent	95-percent	99-percent
1	+2.1	44.4	56.2	72.5
4	+1.6	36.3	42.7	55.5
8	+1.7	25.4	29.7	40.0
16	+1.9	19.0	22.7	29.4
32	+1.9	13.5	16.0	19.2
64	+1.6	9.2	11.4	15.6
128	+1.7	6.6	7.8	11.0
256	+1.6	4.8	5.6	7.4
512	+1.7	3.3	4.0	4.9
1,024	+1.7	2.3	2.7	3.5
2,048	+1.7	1.7	2.0	2.8
4,096	+1.7	1.2	1.4	1.9
8,192	+1.7	0.8	0.9	1.4
16,384	+1.7	0.6	0.7	0.9

Figure 13 ($2.50/day 2005 PPP line): Differences and precision of differences for bootstrapped estimates of changes in group's poverty rates between two points in time, 2005/6 scorecard applied to the 2005/6 validation sample and the 2004/5 PSLM

Sample Size	Difference between estimate and true value			
		Confidence interval (+/− percentage points)		
n	Diff.	90-percent	95-percent	99-percent
1	+4.2	69.2	85.2	105.9
4	+4.4	49.5	60.1	82.9
8	+4.3	36.1	42.9	52.7
16	+3.9	26.3	31.9	39.8
32	+4.0	19.2	23.0	30.2
64	+4.3	14.1	17.6	22.1
128	+4.3	9.7	11.7	15.3
256	+4.4	6.6	7.7	11.8
512	+4.3	4.7	5.6	7.0
1,024	+4.3	3.4	4.0	5.3
2,048	+4.3	2.4	2.8	3.9
4,096	+4.3	1.7	2.1	2.6
8,192	+4.3	1.2	1.4	2.0
16,384	+4.3	0.9	1.0	1.2

Figure 15 ($2.50/day 2005 PPP line): Households by targeting classification and score, along with "Total Accuracy" and BPAC, 2005/6 scorecard applied to the 2004/5 PSLM

Score	Inclusion: < poverty line correctly targeted	Undercoverage: < poverty line mistakenly non-targeted	Leakage: => poverty line mistakenly targeted	Exclusion: => poverty line correctly non-targeted	Total Accuracy Inclusion + Exclusion	BPAC See text
0–4	0.1	68.6	0.0	31.3	31.4	–99.6
5–9	0.4	68.3	0.0	31.3	31.7	–98.7
10–14	1.6	67.1	0.0	31.3	32.9	–95.2
15–19	4.0	64.7	0.0	31.3	35.3	–88.2
20–24	8.2	60.5	0.2	31.1	39.3	–75.8
25–29	15.3	53.4	0.4	30.9	46.2	–54.9
30–34	22.6	46.1	0.8	30.5	53.1	–33.0
35–39	31.8	36.9	1.5	29.7	61.6	–5.2
40–44	40.6	28.1	2.9	28.4	69.0	+22.4
45–49	48.9	19.8	4.5	26.7	75.7	+49.0
50–54	54.1	14.7	6.7	24.5	78.6	+67.2
55–59	59.2	9.6	10.3	21.0	80.2	+85.1
60–64	63.5	5.2	14.0	17.3	80.8	+79.7
65–69	65.4	3.3	17.1	14.2	79.6	+75.1
70–74	66.8	2.0	20.2	11.0	77.8	+70.6
75–79	68.0	0.7	23.6	7.6	75.6	+65.6
80–84	68.4	0.3	27.6	3.6	72.0	+59.8
85–89	68.6	0.1	28.9	2.3	71.0	+57.9
90–94	68.6	0.1	30.7	0.6	69.2	+55.4
95–100	68.7	0.0	31.3	0.0	68.7	+54.5

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

Figure 16 ($2.50/day 2005 PPP line): Households below the poverty line and all households at a given score or at or below a given score cut-off, 2005/6 scorecard applied to the 2004/5 PSLM

Targeting cut-off	% all households who are targeted	% targeted who are poor	% of poor who are targeted	Poor households targeted per non-poor household targeted
0–4	0.1	100.0	0.2	Only poor targeted
5–9	0.4	100.0	0.6	Only poor targeted
10–14	1.6	100.0	2.4	Only poor targeted
15–19	4.1	99.7	5.9	339.6:1
20–24	8.4	97.8	12.0	44.9:1
25–29	15.7	97.5	22.3	39.2:1
30–34	23.4	96.7	32.9	29.2:1
35–39	33.4	95.4	46.3	20.7:1
40–44	43.5	93.4	59.1	14.1:1
45–49	53.5	91.5	71.2	10.8:1
50–54	60.8	88.9	78.7	8.0:1
55–59	69.4	85.2	86.1	5.8:1
60–64	77.5	82.0	92.4	4.5:1
65–69	82.5	79.3	95.2	3.8:1
70–74	87.0	76.7	97.1	3.3:1
75–79	91.6	74.2	98.9	2.9:1
80–84	96.0	71.2	99.5	2.5:1
85–89	97.5	70.3	99.8	2.4:1
90–94	99.3	69.1	99.9	2.2:1
95–100	100.0	68.7	100.0	2.2:1

$3.75/day 2005 PPP Poverty Line Tables

2005/6 Scorecard Applied to 2004/5 PSLM

Figure 9 ($3.75/day 2005 PPP line): Bootstrapped differences between estimated and true household poverty likelihoods with confidence intervals in a large sample (n = 16,384), 2005/6 scorecard applied to the 2004/5 PSLM

	Difference between estimate and true value			
		Confidence interval (+/– percentage points)		
Score	Diff.	90-percent	95-percent	99-percent
0–4	+0.0	0.0	0.0	0.0
5–9	+0.0	0.0	0.0	0.0
10–14	+0.5	0.7	0.9	1.1
15–19	–0.2	0.3	0.3	0.4
20–24	+0.2	0.5	0.5	0.8
25–29	+1.9	0.6	0.7	0.9
30–34	+1.4	0.6	0.7	0.9
35–39	+3.6	1.1	1.3	1.6
40–44	+3.1	0.9	1.1	1.4
45–49	+5.1	1.3	1.6	2.1
50–54	+7.0	1.8	2.1	2.7
55–59	+9.1	1.8	2.1	2.6
60–64	+5.4	2.2	2.6	3.2
65–69	+8.8	2.9	3.4	4.7
70–74	–0.6	3.6	4.2	5.4
75–79	–3.3	3.6	4.2	5.1
80–84	+10.4	3.8	4.7	5.9
85–89	+17.6	6.1	7.2	9.4
90–94	–3.0	4.8	6.0	8.3
95–100	–7.1	12.0	14.0	16.5

Figure 11 ($3.75/day 2005 PPP line): Differences and precision of differences for bootstrapped estimates of poverty rates for groups of households at a point in time, by sample size, 2005/6 scorecard applied to the 2004/5 PSLM

Sample Size	Difference between estimate and true value			
		Confidence interval (+/− percentage points)		
n	Diff.	90-percent	95-percent	99-percent
1	+2.6	40.6	52.5	69.5
4	+3.1	29.5	35.1	46.9
8	+4.0	20.5	25.4	33.9
16	+3.8	14.9	18.9	24.4
32	+4.1	10.7	13.2	17.0
64	+4.1	7.5	9.2	12.1
128	+4.1	5.3	6.4	9.0
256	+4.2	3.9	4.8	6.3
512	+4.1	2.7	3.2	4.3
1,024	+4.1	1.9	2.2	3.0
2,048	+4.2	1.3	1.6	2.2
4,096	+4.2	0.9	1.1	1.4
8,192	+4.2	0.7	0.8	1.1
16,384	+4.1	0.5	0.6	0.8

Figure 13 ($3.75/day 2005 PPP line): Differences and precision of differences for bootstrapped estimates of changes in group's poverty rates between two points in time, 2005/6 scorecard applied to the 2005/6 validation sample and the 2004/5 PSLM

Sample Size	Difference between estimate and true value			
		Confidence interval (+/− percentage points)		
n	Diff.	90-percent	95-percent	99-percent
1	+1.1	60.7	70.3	92.3
4	+2.2	38.1	48.8	66.1
8	+3.4	28.5	33.7	44.9
16	+3.3	20.3	25.4	33.0
32	+3.5	14.7	17.3	23.6
64	+3.5	10.3	12.2	17.2
128	+3.6	7.2	8.5	12.2
256	+3.6	5.1	6.2	8.1
512	+3.6	3.6	4.2	5.9
1,024	+3.6	2.6	3.2	4.0
2,048	+3.7	1.9	2.3	3.0
4,096	+3.6	1.3	1.5	2.0
8,192	+3.6	0.9	1.1	1.4
16,384	+3.6	0.6	0.8	1.0

Figure 15 ($3.75/day 2005 PPP line): Households by targeting classification and score, along with "Total Accuracy" and BPAC, 2005/6 scorecard applied to the 2004/5 PSLM

Score	Inclusion: < poverty line correctly targeted	Undercoverage: < poverty line mistakenly non-targeted	Leakage: => poverty line mistakenly targeted	Exclusion: => poverty line correctly non-targeted	Total Accuracy Inclusion + Exclusion	BPAC See text
0–4	0.0	84.8	0.0	15.1	15.2	–99.9
5–9	0.2	84.6	0.0	15.1	15.4	–99.5
10–14	0.8	84.0	0.0	15.1	16.0	–98.0
15–19	2.6	82.3	0.0	15.1	17.7	–93.8
20–24	6.8	78.1	0.1	15.1	21.8	–84.0
25–29	15.2	69.6	0.3	14.9	30.1	–63.8
30–34	24.0	60.9	0.4	14.7	38.7	–43.0
35–39	33.5	51.3	0.9	14.2	47.7	–20.0
40–44	43.4	41.4	1.4	13.7	57.2	+4.0
45–49	53.5	31.4	2.2	13.0	66.5	+28.6
50–54	61.2	23.6	3.2	11.9	73.2	+48.1
55–59	68.8	16.0	4.8	10.3	79.1	+67.9
60–64	74.6	10.2	6.5	8.7	83.3	+83.5
65–69	78.2	6.7	7.8	7.3	85.5	+90.8
70–74	80.7	4.2	9.1	6.1	86.7	+89.3
75–79	82.9	2.0	10.9	4.2	87.1	+87.1
80–84	83.9	0.9	12.8	2.3	86.3	+84.9
85–89	84.3	0.5	13.6	1.5	85.9	+84.0
90–94	84.7	0.1	14.8	0.3	85.1	+82.5
95–100	84.9	0.0	15.1	0.0	84.9	+82.2

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

Figure 16 ($3.75/day 2005 PPP line): Households below the poverty line and all households at a given score or at or below a given score cut-off, 2005/6 scorecard applied to the 2004/5 PSLM

Targeting cut-off	% all households who are targeted	% targeted who are poor	% of poor who are targeted	Poor households targeted per non-poor household targeted
0–4	0.0	100.0	0.0	Only poor targeted
5–9	0.2	100.0	0.3	Only poor targeted
10–14	0.8	99.1	1.0	115.8:1
15–19	2.6	99.4	3.1	161.8:1
20–24	6.8	99.0	8.0	103.0:1
25–29	15.5	98.3	17.9	58.6:1
30–34	24.4	98.3	28.3	56.5:1
35–39	34.4	97.4	39.5	36.9:1
40–44	44.8	96.9	51.2	31.0:1
45–49	55.7	96.1	63.0	24.8:1
50–54	64.5	95.0	72.2	19.1:1
55–59	73.6	93.4	81.1	14.2:1
60–64	81.1	92.0	87.9	11.5:1
65–69	86.0	90.9	92.1	10.0:1
70–74	89.8	89.9	95.1	8.9:1
75–79	93.8	88.3	97.7	7.6:1
80–84	96.8	86.8	98.9	6.6:1
85–89	97.9	86.1	99.4	6.2:1
90–94	99.6	85.1	99.9	5.7:1
95–100	100.0	84.9	100.0	5.6:1

100% National Poverty Line Tables

2006/5 Scorecard Applied to 2000/1 PIHS

Figure 9 (100% national line): Bootstrapped differences between estimated and true household poverty likelihoods with confidence intervals in a large sample (n = 16,384), 2005/6 scorecard applied to the 2000/1 PIHS

	Difference between estimate and true value			
		Confidence interval (+/− percentage points)		
Score	Diff.	90-percent	95-percent	99-percent
0–4	+12.9	19.6	22.5	26.9
5–9	+12.0	9.6	11.6	15.1
10–14	+11.3	5.6	6.5	8.2
15–19	–2.3	3.6	4.3	5.6
20–24	–8.0	5.3	5.6	6.1
25–29	–10.3	6.3	6.4	6.7
30–34	–6.6	4.4	4.6	5.0
35–39	–4.6	3.5	3.8	4.1
40–44	–11.1	6.5	6.8	7.2
45–49	–4.4	3.2	3.4	3.7
50–54	–3.2	2.5	2.6	2.9
55–59	–3.9	2.7	2.8	3.3
60–64	–6.3	4.0	4.3	4.5
65–69	–1.7	1.3	1.4	1.6
70–74	–3.0	2.7	3.1	3.4
75–79	+0.8	0.4	0.4	0.5
80–84	–1.7	1.5	1.6	2.0
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	0.1	0.1

Figure 11 (100% national line): Differences and precision of differences for bootstrapped estimates of poverty rates for groups of households at a point in time, by sample size, 2005/6 scorecard applied to the 2000/1 PIHS

Sample Size	Difference between estimate and true value			
		Confidence interval (+/− percentage points)		
n	Diff.	90-percent	95-percent	99-percent
1	–3.8	50.5	57.1	70.7
4	–4.3	37.2	44.5	54.3
8	–4.8	27.6	31.7	40.3
16	–4.9	19.3	22.7	28.2
32	–5.0	12.9	15.8	20.0
64	–5.2	9.3	11.0	14.8
128	–5.4	6.7	8.1	10.9
256	–5.4	4.7	5.7	7.5
512	–5.5	3.3	4.0	5.6
1,024	–5.5	2.4	2.8	3.6
2,048	–5.5	1.7	2.0	2.5
4,096	–5.6	1.2	1.4	1.8
8,192	–5.5	0.9	1.0	1.4
16,384	–5.5	0.6	0.7	0.9

Figure 13 (100% national line): Differences and precision of differences for bootstrapped estimates of changes in group's poverty rates between two points in time, 2005/6 scorecard applied to the 2005/6 validation sample and the 2000/1 PIHS

Sample Size	Difference between estimate and true value			
		Confidence interval (+/– percentage points)		
n	Diff.	90-percent	95-percent	99-percent
1	–6.1	70.3	84.9	100.0
4	–6.2	50.3	62.3	81.2
8	–6.6	33.4	41.8	51.6
16	–6.0	22.9	27.6	40.8
32	–6.0	16.4	19.2	25.1
64	–6.2	11.8	13.5	18.5
128	–6.6	8.4	10.1	14.1
256	–6.5	6.2	7.3	9.3
512	–6.5	4.3	5.0	7.0
1,024	–6.6	3.1	3.6	4.5
2,048	–6.6	2.2	2.6	3.3
4,096	–6.6	1.5	1.7	2.2
8,192	–6.6	1.0	1.2	1.7
16,384	–6.6	0.8	0.9	1.1

Figure 15 (100% national line): Households by targeting classification and score, along with "Total Accuracy" and BPAC, 2005/6 scorecard applied to the 2000/1 PIHS

Score	Inclusion: < poverty line correctly targeted	Undercoverage: < poverty line mistakenly non-targeted	Leakage: => poverty line mistakenly targeted	Exclusion: => poverty line correctly non-targeted	Total Accuracy Inclusion + Exclusion	BPAC See text
0–4	0.1	29.1	0.0	70.9	70.9	–99.5
5–9	0.3	28.9	0.1	70.8	71.1	–97.9
10–14	1.4	27.7	0.5	70.4	71.8	–88.6
15–19	3.5	25.6	1.6	69.3	72.7	–70.5
20–24	7.3	21.8	3.9	67.0	74.3	–36.3
25–29	12.9	16.2	8.3	62.6	75.4	+17.0
30–34	17.3	11.9	13.7	57.1	74.4	+52.8
35–39	20.8	8.3	20.9	50.0	70.8	+28.3
40–44	23.9	5.2	29.2	41.7	65.6	–0.3
45–49	26.0	3.1	36.9	33.9	59.9	–26.8
50–54	27.2	1.9	44.0	26.9	54.1	–50.9
55–59	28.2	1.0	51.6	19.3	47.5	–77.0
60–64	28.9	0.2	57.5	13.4	42.2	–97.5
65–69	29.0	0.1	61.8	9.1	38.1	–112.2
70–74	29.1	0.1	64.5	6.3	35.4	–121.6
75–79	29.1	0.0	67.2	3.7	32.8	–130.7
80–84	29.1	0.0	69.1	1.8	30.9	–137.1
85–89	29.1	0.0	69.7	1.1	30.3	–139.4
90–94	29.1	0.0	70.6	0.2	29.4	–142.5
95–100	29.1	0.0	70.9	0.0	29.1	–143.3

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

Figure 16 (100% national line): Households below the poverty line and all households at a given score or at or below a given score cut-off, 2005/6 scorecard applied to the 2000/1 PIHS

Targeting cut-off	% all households who are targeted	% targeted who are poor	% of poor who are targeted	Poor households targeted per non-poor household targeted
0–4	0.1	85.2	0.2	5.8:1
5–9	0.3	80.2	0.9	4.1:1
10–14	1.9	73.0	4.8	2.7:1
15–19	5.1	68.2	12.0	2.1:1
20–24	11.2	65.2	25.1	1.9:1
25–29	21.2	60.8	44.2	1.5:1
30–34	31.0	55.7	59.3	1.3:1
35–39	41.7	49.9	71.5	1.0:1
40–44	53.1	45.0	82.1	0.8:1
45–49	62.9	41.3	89.3	0.7:1
50–54	71.1	38.2	93.3	0.6:1
55–59	79.7	35.3	96.7	0.5:1
60–64	86.4	33.4	99.2	0.5:1
65–69	90.8	31.9	99.6	0.5:1
70–74	93.6	31.1	99.8	0.5:1
75–79	96.3	30.2	99.9	0.4:1
80–84	98.2	29.7	100.0	0.4:1
85–89	98.9	29.5	100.0	0.4:1
90–94	99.8	29.2	100.0	0.4:1
95–100	100.0	29.1	100.0	0.4:1

50% National Poverty Line Tables

2005/6 Scorecard Applied to 2000/1 PIHS

Figure 9 (50% national line): Bootstrapped differences between estimated and true household poverty likelihoods with confidence intervals in a large sample (n = 16,384), 2005/6 scorecard applied to the 2000/1 PIHS

	Difference between estimate and true value			
		Confidence interval (+/− percentage points)		
Score	Diff.	90-percent	95-percent	99-percent
0–4	–6.7	11.5	14.7	19.0
5–9	–0.7	4.5	5.4	6.5
10–14	+6.7	2.0	2.3	3.0
15–19	–2.4	2.8	3.1	4.1
20–24	–1.1	1.2	1.4	1.9
25–29	–2.7	1.8	1.9	2.1
30–34	–3.0	2.1	2.2	2.5
35–39	–2.0	1.4	1.5	1.7
40–44	–2.6	1.8	1.9	2.0
45–49	–0.5	0.8	0.9	1.3
50–54	–1.1	0.9	1.1	1.2
55–59	+0.1	0.1	0.1	0.1
60–64	–1.0	0.9	1.0	1.2
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

Figure 11 (50% national line): Differences and precision of differences for bootstrapped estimates of poverty rates for groups of households at a point in time, by sample size, 2005/6 scorecard applied to the 2000/1 PIHS

Sample Size	Difference between estimate and true value			
		Confidence interval (+/− percentage points)		
n	Diff.	90-percent	95-percent	99-percent
1	–0.9	1.4	18.7	41.9
4	–1.1	6.0	18.1	29.4
8	–0.8	7.0	12.3	17.9
16	–1.0	6.2	7.9	11.0
32	–1.2	4.6	5.6	8.2
64	–1.3	3.6	4.2	5.2
128	–1.3	2.6	3.0	3.7
256	–1.3	2.0	2.3	2.8
512	–1.3	1.4	1.6	1.9
1,024	–1.3	1.0	1.2	1.5
2,048	–1.4	0.7	0.8	1.1
4,096	–1.3	0.5	0.6	0.8
8,192	–1.3	0.3	0.4	0.5
16,384	–1.3	0.3	0.3	0.4

Figure 13 (50% national line): Differences and precision of differences for bootstrapped estimates of changes in group's poverty rates between two points in time, 2005/6 scorecard applied to the 2005/6 validation sample and the 2000/1 PIHS

Sample Size	Difference between estimate and true value			
		Confidence interval (+/– percentage points)		
n	Diff.	90-percent	95-percent	99-percent
1	–1.3	1.0	18.0	41.3
4	–1.5	5.8	17.8	37.8
8	–1.1	7.0	12.1	23.4
16	–1.0	6.0	10.4	20.6
32	–1.2	5.6	9.0	13.5
64	–1.3	4.3	6.7	8.3
128	–1.3	3.5	4.2	5.4
256	–1.3	2.5	2.8	3.7
512	–1.3	1.7	1.9	2.5
1,024	–1.3	1.2	1.4	1.9
2,048	–1.3	0.8	1.0	1.2
4,096	–1.3	0.6	0.7	0.9
8,192	–1.3	0.4	0.5	0.7
16,384	–1.3	0.3	0.3	0.5

Figure 15 (50% national line): Households by targeting classification and score, along with "Total Accuracy" and BPAC, 2005/6 scorecard applied to the 2000/1 PIHS

Score	Inclusion: < poverty line correctly targeted	Undercoverage: < poverty line mistakenly non-targeted	Leakage: => poverty line mistakenly targeted	Exclusion: => poverty line correctly non-targeted	Total Accuracy Inclusion + Exclusion	BPAC See text
0–4	0.0	1.3	0.1	98.6	98.6	–93.9
5–9	0.0	1.3	0.3	98.4	98.4	–73.2
10–14	0.1	1.2	1.9	96.8	96.9	–44.8
15–19	0.2	1.1	4.9	93.8	94.0	–281.1
20–24	0.4	0.9	10.8	87.9	88.3	–742.2
25–29	0.7	0.6	20.5	78.2	78.9	–1,493.3
30–34	0.9	0.4	30.1	68.6	69.4	–2,241.4
35–39	1.0	0.3	40.7	58.0	59.0	–3,064.4
40–44	1.1	0.2	52.0	46.7	47.8	–3,939.3
45–49	1.2	0.1	61.7	37.0	38.2	–4,696.8
50–54	1.2	0.0	69.9	28.8	30.1	–5,330.0
55–59	1.3	0.0	78.5	20.2	21.5	–5,997.2
60–64	1.3	0.0	85.1	13.6	14.9	–6,512.4
65–69	1.3	0.0	89.5	9.2	10.5	–6,857.0
70–74	1.3	0.0	92.3	6.4	7.7	–7,072.2
75–79	1.3	0.0	95.0	3.7	5.0	–7,280.5
80–84	1.3	0.0	96.9	1.8	3.1	–7,428.2
85–89	1.3	0.0	97.6	1.1	2.4	–7,480.6
90–94	1.3	0.0	98.5	0.2	1.5	–7,549.6
95–100	1.3	0.0	98.7	0.0	1.3	–7,568.8

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

Figure 16 (50% national line): Households below the poverty line and all households at a given score or at or below a given score cut-off, 2005/6 scorecard applied to the 2000/1 PIHS

Targeting cut-off	% all households who are targeted	% targeted who are poor	% of poor who are targeted	Poor households targeted per non-poor household targeted
0–4	0.1	4.9	0.3	0.1:1
5–9	0.3	3.2	0.8	0.0:1
10–14	1.9	2.9	4.3	0.0:1
15–19	5.1	4.0	16.1	0.0:1
20–24	11.2	3.5	30.5	0.0:1
25–29	21.2	3.2	53.4	0.0:1
30–34	31.0	2.8	67.5	0.0:1
35–39	41.7	2.4	76.9	0.0:1
40–44	53.1	2.1	87.4	0.0:1
45–49	62.9	1.9	93.1	0.0:1
50–54	71.1	1.7	96.5	0.0:1
55–59	79.7	1.6	97.5	0.0:1
60–64	86.4	1.5	100.0	0.0:1
65–69	90.8	1.4	100.0	0.0:1
70–74	93.6	1.4	100.0	0.0:1
75–79	96.3	1.3	100.0	0.0:1
80–84	98.2	1.3	100.0	0.0:1
85–89	98.9	1.3	100.0	0.0:1
90–94	99.8	1.3	100.0	0.0:1
95–100	100.0	1.3	100.0	0.0:1

75% National Poverty Line Tables

2005/6 Scorecard Applied to 2000/1 PIHS

Figure 9 (75% national line): Bootstrapped differences between estimated and true household poverty likelihoods with confidence intervals in a large sample (n = 16,384), 2005/6 scorecard applied to the 2000/1 PIHS

	Difference between estimate and true value			
		Confidence interval (+/− percentage points)		
Score	**Diff.**	**90-percent**	**95-percent**	**99-percent**
0–4	+17.6	25.4	30.8	42.5
5–9	+27.5	13.6	16.3	20.9
10–14	+6.2	5.8	7.0	9.0
15–19	+4.0	4.0	4.7	6.3
20–24	–7.1	4.8	5.0	5.5
25–29	–13.2	7.6	7.8	8.2
30–34	–7.4	4.7	4.9	5.2
35–39	–3.7	2.6	2.7	2.9
40–44	–8.6	5.1	5.3	5.5
45–49	–0.9	1.1	1.3	1.7
50–54	–2.4	1.7	1.8	2.0
55–59	–2.3	1.5	1.6	1.8
60–64	–3.1	2.1	2.3	2.6
65–69	–0.5	0.5	0.5	0.6
70–74	–2.3	2.3	2.6	3.2
75–79	+0.0	0.0	0.0	0.0
80–84	–0.3	0.4	0.5	0.6
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

Figure 11 (75% national line): Differences and precision of differences for bootstrapped estimates of poverty rates for groups of households at a point in time, by sample size, 2005/6 scorecard applied to the 2000/1 PIHS

Sample Size	Difference between estimate and true value			
		Confidence interval (+/− percentage points)		
n	Diff.	90-percent	95-percent	99-percent
1	–3.0	34.7	45.1	60.3
4	–3.6	24.3	29.9	38.7
8	–3.4	16.9	20.7	27.8
16	–3.9	12.6	15.3	20.8
32	–4.0	9.7	11.6	15.7
64	–4.2	6.9	8.2	10.2
128	–4.3	5.1	5.9	7.4
256	–4.3	3.7	4.3	5.6
512	–4.3	2.5	3.1	3.9
1,024	–4.4	1.7	2.1	2.8
2,048	–4.4	1.2	1.4	2.0
4,096	–4.4	0.9	1.1	1.4
8,192	–4.4	0.6	0.8	1.0
16,384	–4.4	0.5	0.5	0.7

Figure 13 (75% national line): Differences and precision of differences for bootstrapped estimates of changes in group's poverty rates between two points in time, 2005/6 scorecard applied to the 2005/6 validation sample and the 2000/1 PIHS

Sample Size	Difference between estimate and true value			
		Confidence interval (+/– percentage points)		
n	Diff.	90-percent	95-percent	99-percent
1	–3.7	44.0	63.3	85.7
4	–3.5	33.4	41.9	63.3
8	–3.4	21.9	28.0	40.0
16	–3.9	16.6	20.4	28.9
32	–3.9	12.1	14.4	19.2
64	–4.2	8.6	10.4	13.6
128	–4.4	6.0	7.2	9.1
256	–4.3	4.2	5.1	6.6
512	–4.3	3.0	3.5	4.8
1,024	–4.4	2.2	2.6	3.5
2,048	–4.4	1.5	1.8	2.4
4,096	–4.4	1.1	1.3	1.7
8,192	–4.4	0.8	0.9	1.2
16,384	–4.4	0.5	0.6	0.8

Figure 15 (75% national line): Households by targeting classification and score, along with "Total Accuracy" and BPAC, 2005/6 scorecard applied to the 2000/1 PIHS

Score	Inclusion: < poverty line correctly targeted	Undercoverage: < poverty line mistakenly non-targeted	Leakage: => poverty line mistakenly targeted	Exclusion: => poverty line correctly non-targeted	Total Accuracy Inclusion + Exclusion	BPAC See text
0–4	0.0	10.1	0.0	89.9	89.9	–98.9
5–9	0.1	10.0	0.2	89.7	89.8	–95.3
10–14	0.6	9.5	1.3	88.6	89.2	–74.9
15–19	1.6	8.5	3.6	86.3	87.9	–34.0
20–24	3.1	7.0	8.2	81.7	84.8	+19.3
25–29	5.5	4.6	15.7	74.2	79.8	–55.0
30–34	7.0	3.1	24.0	65.8	72.8	–137.9
35–39	7.9	2.2	33.8	56.1	64.0	–234.3
40–44	8.9	1.2	44.2	45.7	54.6	–337.3
45–49	9.4	0.7	53.5	36.4	45.8	–429.7
50–54	9.7	0.5	61.5	28.4	38.1	–508.3
55–59	9.9	0.2	69.8	20.1	29.9	–591.1
60–64	10.0	0.1	76.4	13.5	23.6	–655.5
65–69	10.1	0.0	80.8	9.1	19.2	–699.2
70–74	10.1	0.0	83.5	6.4	16.5	–726.3
75–79	10.1	0.0	86.2	3.7	13.8	–752.8
80–84	10.1	0.0	88.1	1.8	11.9	–771.6
85–89	10.1	0.0	88.8	1.1	11.2	–778.3
90–94	10.1	0.0	89.6	0.2	10.4	–787.0
95–100	10.1	0.0	89.9	0.0	10.1	–789.5

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

Figure 16 (75% national line): Households below the poverty line and all households at a given score or at or below a given score cut-off, 2005/6 scorecard applied to the 2000/1 PIHS

Targeting cut-off	% all households who are targeted	% targeted who are poor	% of poor who are targeted	Poor households targeted per non-poor household targeted
0–4	0.1	54.3	0.4	1.2:1
5–9	0.3	42.8	1.4	0.7:1
10–14	1.9	32.2	6.1	0.5:1
15–19	5.1	30.5	15.4	0.4:1
20–24	11.2	27.4	30.5	0.4:1
25–29	21.2	26.1	54.7	0.4:1
30–34	31.0	22.5	68.9	0.3:1
35–39	41.7	19.0	78.5	0.2:1
40–44	53.1	16.8	88.3	0.2:1
45–49	62.9	14.9	93.1	0.2:1
50–54	71.1	13.6	95.5	0.2:1
55–59	79.7	12.4	97.9	0.1:1
60–64	86.4	11.6	99.4	0.1:1
65–69	90.8	11.1	99.7	0.1:1
70–74	93.6	10.8	99.9	0.1:1
75–79	96.3	10.5	99.9	0.1:1
80–84	98.2	10.3	100.0	0.1:1
85–89	98.9	10.2	100.0	0.1:1
90–94	99.8	10.1	100.0	0.1:1
95–100	100.0	10.1	100.0	0.1:1

125% National Poverty Line Tables

2005/6 Scorecard Applied to 2000/1 PIHS

Figure 9 (125% national line): Bootstrapped differences between estimated and true household poverty likelihoods with confidence intervals in a large sample (n = 16,384), 2005/6 scorecard applied to the 2000/1 PIHS

	Difference between estimate and true value			
		Confidence interval (+/− percentage points)		
Score	Diff.	90-percent	95-percent	99-percent
0–4	–0.8	7.3	8.8	12.1
5–9	+2.5	5.1	5.6	6.5
10–14	+3.2	4.3	5.0	6.2
15–19	+4.7	2.7	3.2	3.9
20–24	–8.5	5.4	5.7	6.1
25–29	–5.2	3.4	3.5	3.8
30–34	–3.9	3.0	3.2	3.7
35–39	–8.4	5.2	5.5	5.9
40–44	–12.1	7.2	7.3	7.8
45–49	–3.6	3.0	3.2	3.7
50–54	–3.9	3.1	3.3	3.8
55–59	–6.0	4.0	4.2	4.8
60–64	–10.0	6.3	6.6	7.1
65–69	–6.0	4.3	4.6	4.8
70–74	–8.6	6.1	6.3	7.0
75–79	–0.1	1.3	1.5	1.9
80–84	–0.5	1.5	1.8	2.3
85–89	–4.7	4.3	4.9	5.6
90–94	+0.9	0.0	0.0	0.0
95–100	+0.0	0.0	0.1	0.1

Figure 11 (125% national line): Differences and precision of differences for bootstrapped estimates of poverty rates for groups of households at a point in time, by sample size, 2005/6 scorecard applied to the 2000/1 PIHS

Sample Size	Difference between estimate and true value			
		Confidence interval (+/– percentage points)		
n	Diff.	90-percent	95-percent	99-percent
1	–4.3	52.1	59.6	74.3
4	–4.8	38.7	44.8	56.1
8	–5.4	28.6	33.6	43.6
16	–5.9	19.9	24.1	29.4
32	–6.2	14.1	16.0	20.5
64	–6.3	10.2	11.9	15.4
128	–6.1	6.9	8.4	11.7
256	–6.1	5.0	6.2	8.0
512	–6.1	3.5	4.3	5.6
1,024	–6.2	2.5	3.0	4.2
2,048	–6.2	1.8	2.2	2.9
4,096	–6.2	1.3	1.5	2.1
8,192	–6.1	0.9	1.1	1.4
16,384	–6.1	0.6	0.7	1.0

Figure 13 (125% national line): Differences and precision of differences for bootstrapped estimates of changes in group's poverty rates between two points in time, 2005/6 scorecard applied to the 2005/6 validation sample and the 2000/1 PIHS

Sample Size	Difference between estimate and true value			
		Confidence interval (+/– percentage points)		
n	Diff.	90-percent	95-percent	99-percent
1	–6.0	76.9	87.5	106.7
4	–6.5	56.2	64.9	82.9
8	–7.3	37.9	45.3	60.1
16	–7.2	26.8	31.5	43.2
32	–7.6	18.8	22.0	30.4
64	–7.7	13.9	16.5	20.3
128	–7.4	9.8	11.9	15.1
256	–7.5	7.1	8.4	10.8
512	–7.5	4.8	5.7	7.7
1,024	–7.5	3.5	4.0	5.1
2,048	–7.5	2.3	2.8	3.9
4,096	–7.5	1.7	2.0	2.6
8,192	–7.4	1.2	1.4	1.8
16,384	–7.4	0.8	1.0	1.3

Figure 15 (125% national line): Households by targeting classification and score, along with "Total Accuracy" and BPAC, 2005/6 scorecard applied to the 2000/1 PIHS

Score	Inclusion: < poverty line correctly targeted	Undercoverage: < poverty line mistakenly non-targeted	Leakage: => poverty line mistakenly targeted	Exclusion: => poverty line correctly non-targeted	Total Accuracy Inclusion + Exclusion	BPAC See text
0–4	0.1	49.5	0.0	50.4	50.5	–99.7
5–9	0.3	49.3	0.0	50.4	50.7	–98.7
10–14	1.8	47.8	0.1	50.3	52.0	–92.6
15–19	4.5	45.1	0.7	49.8	54.2	–80.7
20–24	9.6	40.0	1.6	48.8	58.4	–58.0
25–29	17.7	31.9	3.5	46.9	64.6	–21.6
30–34	24.6	25.0	6.4	44.0	68.7	+12.2
35–39	31.4	18.2	10.3	40.1	71.5	+47.5
40–44	37.6	12.0	15.5	34.9	72.4	+68.7
45–49	41.8	7.8	21.2	29.2	71.0	+57.3
50–54	44.6	5.0	26.5	23.9	68.5	+46.5
55–59	46.9	2.7	32.9	17.5	64.4	+33.7
60–64	48.5	1.1	37.9	12.5	60.9	+23.5
65–69	49.1	0.5	41.8	8.6	57.7	+15.8
70–74	49.4	0.2	44.2	6.2	55.5	+10.8
75–79	49.5	0.1	46.8	3.6	53.1	+5.7
80–84	49.6	0.0	48.6	1.8	51.4	+2.0
85–89	49.6	0.0	49.3	1.1	50.7	+0.7
90–94	49.6	0.0	50.2	0.2	49.8	–1.1
95–100	49.6	0.0	50.4	0.0	49.6	–1.6

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

Figure 16 (125% national line): Households below the poverty line and all households at a given score or at or below a given score cut-off, 2005/6 scorecard applied to the 2000/1 PIHS

Targeting cut-off	% all households who are targeted	% targeted who are poor	% of poor who are targeted	Poor households targeted per non-poor household targeted
0–4	0.1	96.5	0.1	27.6:1
5–9	0.3	94.7	0.6	18.0:1
10–14	1.9	92.4	3.6	12.2:1
15–19	5.1	87.2	9.0	6.8:1
20–24	11.2	85.4	19.3	5.8:1
25–29	21.2	83.4	35.7	5.0:1
30–34	31.0	79.4	49.7	3.9:1
35–39	41.7	75.3	63.4	3.1:1
40–44	53.1	70.7	75.8	2.4:1
45–49	62.9	66.3	84.2	2.0:1
50–54	71.1	62.7	89.9	1.7:1
55–59	79.7	58.8	94.5	1.4:1
60–64	86.4	56.1	97.7	1.3:1
65–69	90.8	54.0	99.0	1.2:1
70–74	93.6	52.7	99.6	1.1:1
75–79	96.3	51.4	99.8	1.1:1
80–84	98.2	50.5	99.9	1.0:1
85–89	98.9	50.2	100.0	1.0:1
90–94	99.8	49.7	100.0	1.0:1
95–100	100.0	49.6	100.0	1.0:1

200% National Poverty Line Tables

2005/6 Scorecard Applied to 2000/1 PIHS

Figure 9 (200% national line): Bootstrapped differences between estimated and true household poverty likelihoods with confidence intervals in a large sample (n = 16,384), 2005/6 scorecard applied to the 2000/1 PIHS

	Difference between estimate and true value			
		Confidence interval (+/– percentage points)		
Score	Diff.	90-percent	95-percent	99-percent
0–4	+0.0	0.0	0.0	0.0
5–9	+1.7	2.7	3.3	3.9
10–14	+0.5	0.7	0.7	1.0
15–19	–0.1	0.4	0.4	0.5
20–24	+5.6	1.9	2.3	3.1
25–29	–0.5	0.6	0.8	1.0
30–34	+0.5	0.8	1.0	1.2
35–39	–1.8	1.5	1.6	2.1
40–44	–2.1	1.6	1.7	1.9
45–49	+1.3	1.8	2.0	2.7
50–54	–2.2	2.1	2.5	3.2
55–59	–8.8	5.5	5.7	6.0
60–64	–3.4	3.1	3.3	4.2
65–69	+6.3	3.5	4.3	5.3
70–74	–16.1	10.1	10.6	11.2
75–79	–3.6	4.4	5.4	7.1
80–84	–4.3	4.2	5.0	6.4
85–89	–15.4	12.4	13.2	15.0
90–94	+5.9	4.6	5.4	6.7
95–100	–7.9	11.8	13.0	17.2

Figure 11 (200% national line): Differences and precision of differences for bootstrapped estimates of poverty rates for groups of households at a point in time, by sample size, 2005/6 scorecard applied to the 2000/1 PIHS

Sample Size	Difference between estimate and true value			
		Confidence interval (+/– percentage points)		
n	Diff.	90-percent	95-percent	99-percent
1	–2.7	40.6	49.4	67.3
4	–1.0	31.0	37.8	49.3
8	–1.3	22.7	28.8	36.9
16	–1.8	15.8	20.2	26.2
32	–1.6	12.0	13.9	18.6
64	–1.9	8.3	9.6	12.6
128	–1.7	6.2	7.3	9.1
256	–1.6	4.2	5.0	6.6
512	–1.7	2.9	3.5	4.4
1,024	–1.7	2.1	2.5	3.2
2,048	–1.7	1.5	1.8	2.5
4,096	–1.7	1.1	1.3	1.7
8,192	–1.7	0.7	0.9	1.1
16,384	–1.7	0.5	0.6	0.8

Figure 13 (200% national line): Differences and precision of differences for bootstrapped estimates of changes in group's poverty rates between two points in time, 2005/6 scorecard applied to the 2005/6 validation sample and the 2000/1 PIHS

Sample Size	Difference between estimate and true value			
		Confidence interval (+/– percentage points)		
n	Diff.	90-percent	95-percent	99-percent
1	–5.6	64.3	75.2	98.6
4	–3.2	48.0	59.2	75.9
8	–3.5	35.4	41.7	56.7
16	–4.1	25.8	30.3	41.3
32	–3.7	18.3	21.6	28.9
64	–3.7	12.6	15.1	19.8
128	–3.6	9.0	10.7	13.8
256	–3.5	6.3	7.5	9.8
512	–3.7	4.5	5.4	6.6
1,024	–3.7	3.1	3.6	4.7
2,048	–3.7	2.3	2.7	3.5
4,096	–3.7	1.5	1.9	2.5
8,192	–3.7	1.1	1.3	1.8
16,384	–3.7	0.8	0.9	1.3

Figure 15 (200% national line): Households by targeting classification and score, along with "Total Accuracy" and BPAC, 2005/6 scorecard applied to the 2000/1 PIHS

Score	Inclusion: < poverty line correctly targeted	Undercoverage: < poverty line mistakenly non-targeted	Leakage: => poverty line mistakenly targeted	Exclusion: => poverty line correctly non-targeted	Total Accuracy Inclusion + Exclusion	BPAC See text
0–4	0.1	81.8	0.0	18.1	18.2	–99.8
5–9	0.3	81.6	0.0	18.1	18.4	–99.2
10–14	1.9	80.0	0.0	18.1	20.0	–95.3
15–19	5.1	76.8	0.0	18.1	23.2	–87.5
20–24	11.0	70.9	0.2	17.9	28.9	–72.9
25–29	20.7	61.2	0.5	17.6	38.4	–48.8
30–34	30.2	51.7	0.8	17.3	47.5	–25.3
35–39	40.3	41.6	1.4	16.7	57.0	+0.1
40–44	50.8	31.1	2.3	15.8	66.5	+26.9
45–49	59.3	22.6	3.7	14.4	73.7	+49.2
50–54	65.9	16.0	5.2	12.9	78.8	+67.3
55–59	72.3	9.6	7.4	10.7	83.0	+85.7
60–64	76.7	5.2	9.7	8.4	85.2	+88.2
65–69	79.0	2.9	11.8	6.3	85.3	+85.6
70–74	80.3	1.6	13.3	4.8	85.1	+83.8
75–79	81.2	0.7	15.1	3.0	84.2	+81.6
80–84	81.6	0.3	16.6	1.5	83.1	+79.7
85–89	81.8	0.1	17.1	1.1	82.9	+79.2
90–94	81.9	0.0	17.9	0.2	82.1	+78.2
95–100	81.9	0.0	18.1	0.0	81.9	+77.9

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

Figure 16 (200% national line): Households below the poverty line and all households at a given score or at or below a given score cut-off, 2005/6 scorecard applied to the 2000/1 PIHS

Targeting cut-off	% all households who are targeted	% targeted who are poor	% of poor who are targeted	Poor households targeted per non-poor household targeted
0–4	0.1	100.0	0.1	Only poor targeted
5–9	0.3	98.4	0.4	63.3:1
10–14	1.9	99.3	2.3	140.1:1
15–19	5.1	99.5	6.2	190.9:1
20–24	11.2	97.9	13.4	46.2:1
25–29	21.2	97.8	25.3	43.5:1
30–34	31.0	97.4	36.9	37.1:1
35–39	41.7	96.6	49.2	28.1:1
40–44	53.1	95.6	62.0	21.6:1
45–49	62.9	94.2	72.4	16.1:1
50–54	71.1	92.6	80.5	12.6:1
55–59	79.7	90.7	88.3	9.7:1
60–64	86.4	88.8	93.7	7.9:1
65–69	90.8	87.0	96.5	6.7:1
70–74	93.6	85.8	98.1	6.0:1
75–79	96.3	84.3	99.2	5.4:1
80–84	98.2	83.1	99.7	4.9:1
85–89	98.9	82.7	99.9	4.8:1
90–94	99.8	82.1	100.0	4.6:1
95–100	100.0	81.9	100.0	4.5:1

USAID "Extreme" Poverty Line Tables

2005/6 Scorecard Applied to 2000/1 PIHS

Figure 9 (USAID "extreme" line): Bootstrapped differences between estimated and true household poverty likelihoods with confidence intervals in a large sample (n = 16,384), 2005/6 scorecard applied to the 2000/1 PIHS

	Difference between estimate and true value			
		Confidence interval (+/– percentage points)		
Score	Diff.	90-percent	95-percent	99-percent
0–4	–0.6	24.1	27.2	32.2
5–9	+7.5	13.7	16.3	21.0
10–14	+14.5	6.1	7.2	9.7
15–19	–3.1	4.0	4.9	6.3
20–24	–3.5	3.3	3.6	4.5
25–29	–8.7	5.4	5.6	6.0
30–34	–5.5	3.7	4.0	4.2
35–39	–0.5	1.5	1.8	2.5
40–44	–5.3	3.4	3.6	3.8
45–49	+2.3	1.0	1.2	1.5
50–54	–0.6	1.1	1.3	1.6
55–59	–0.4	0.8	1.0	1.3
60–64	–2.6	1.9	2.0	2.2
65–69	–0.3	0.5	0.5	0.7
70–74	–0.1	0.2	0.2	0.2
75–79	+0.0	0.0	0.0	0.0
80–84	–0.4	0.6	0.7	0.9
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

Figure 11 (USAID "extreme" line): Differences and precision of differences for bootstrapped estimates of poverty rates for groups of households at a point in time, by sample size, 2005/6 scorecard applied to the 2000/1 PIHS

Sample Size	Difference between estimate and true value			
		Confidence interval (+/– percentage points)		
n	Diff.	90-percent	95-percent	99-percent
1	–1.1	38.8	47.2	64.4
4	–1.7	26.6	31.8	42.3
8	–1.7	19.8	22.9	29.4
16	–2.2	14.0	16.4	22.2
32	–2.0	10.1	12.2	16.3
64	–2.1	6.9	8.4	11.1
128	–2.2	5.1	6.0	7.5
256	–2.2	3.7	4.4	5.3
512	–2.2	2.6	3.2	4.2
1,024	–2.2	1.8	2.1	2.9
2,048	–2.2	1.3	1.5	1.9
4,096	–2.2	0.9	1.0	1.3
8,192	–2.2	0.6	0.7	1.0
16,384	–2.2	0.5	0.6	0.7

Figure 13 (USAID "extreme" line): Differences and precision of differences for bootstrapped estimates of changes in group's poverty rates between two points in time, 2005/6 scorecard applied to the 2005/6 validation sample and the 2000/1 PIHS

Sample Size	Difference between estimate and true value			
		Confidence interval (+/– percentage points)		
n	Diff.	90-percent	95-percent	99-percent
1	–1.9	55.8	67.7	95.6
4	–1.9	37.3	47.6	68.2
8	–1.7	25.6	32.8	44.9
16	–2.3	18.2	22.6	30.8
32	–2.2	12.9	15.7	20.7
64	–2.5	8.8	10.7	15.1
128	–2.7	6.6	7.7	10.2
256	–2.7	4.8	5.7	7.6
512	–2.6	3.5	4.1	5.4
1,024	–2.7	2.4	2.9	3.6
2,048	–2.7	1.6	2.0	2.6
4,096	–2.7	1.1	1.3	1.8
8,192	–2.7	0.8	1.0	1.3
16,384	–2.7	0.6	0.7	0.9

Figure 15 (USAID "extreme" line): Households by targeting classification and score, along with "Total Accuracy" and BPAC, 2005/6 scorecard applied to the 2000/1 PIHS

Score	Inclusion: < poverty line correctly targeted	Undercoverage: < poverty line mistakenly non-targeted	Leakage: => poverty line mistakenly targeted	Exclusion: => poverty line correctly non-targeted	Total Accuracy Inclusion + Exclusion	BPAC See text
0–4	0.1	13.8	0.0	86.2	86.2	–99.1
5–9	0.2	13.6	0.1	86.0	86.2	–96.1
10–14	0.8	13.0	1.1	85.1	85.9	–80.2
15–19	2.1	11.7	3.0	83.2	85.3	–47.8
20–24	4.4	9.5	6.9	79.3	83.7	+12.9
25–29	7.6	6.3	13.6	72.5	80.1	+1.3
30–34	9.6	4.2	21.4	64.8	74.4	–54.7
35–39	11.1	2.7	30.6	55.5	66.6	–121.6
40–44	12.3	1.5	40.8	45.4	57.7	–195.0
45–49	12.9	0.9	50.0	36.2	49.1	–261.7
50–54	13.3	0.5	57.8	28.3	41.6	–318.4
55–59	13.6	0.2	66.1	20.0	33.6	–378.5
60–64	13.8	0.1	72.6	13.5	27.3	–425.4
65–69	13.8	0.0	77.0	9.1	23.0	–457.2
70–74	13.8	0.0	79.8	6.4	20.2	–477.2
75–79	13.8	0.0	82.5	3.7	17.5	–496.6
80–84	13.8	0.0	84.4	1.8	15.6	–510.3
85–89	13.8	0.0	85.0	1.1	15.0	–515.1
90–94	13.8	0.0	85.9	0.2	14.1	–521.6
95–100	13.8	0.0	86.2	0.0	13.8	–523.4

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

Figure 16 (USAID "extreme" line): Households below the poverty line and all households at a given score or at or below a given score cut-off, 2005/6 scorecard applied to the 2000/1 PIHS

Targeting cut-off	% all households who are targeted	% targeted who are poor	% of poor who are targeted	Poor households targeted per non-poor household targeted
0–4	0.1	73.3	0.4	2.7:1
5–9	0.3	60.2	1.5	1.5:1
10–14	1.9	42.6	5.9	0.7:1
15–19	5.1	41.1	15.2	0.7:1
20–24	11.2	38.9	31.6	0.6:1
25–29	21.2	35.6	54.6	0.6:1
30–34	31.0	31.0	69.6	0.4:1
35–39	41.7	26.6	80.2	0.4:1
40–44	53.1	23.2	89.3	0.3:1
45–49	62.9	20.6	93.6	0.3:1
50–54	71.1	18.7	96.2	0.2:1
55–59	79.7	17.0	98.3	0.2:1
60–64	86.4	15.9	99.6	0.2:1
65–69	90.8	15.2	99.9	0.2:1
70–74	93.6	14.8	99.9	0.2:1
75–79	96.3	14.3	99.9	0.2:1
80–84	98.2	14.1	100.0	0.2:1
85–89	98.9	14.0	100.0	0.2:1
90–94	99.8	13.9	100.0	0.2:1
95–100	100.0	13.8	100.0	0.2:1

$1.25/day 2005 PPP Poverty Line Tables

2005/6 Scorecard Applied to 2000/1 PIHS

Figure 9 ($1.25/day 2005 PPP line): Bootstrapped differences between estimated and true household poverty likelihoods with confidence intervals in a large sample (n = 16,384), 2005/6 scorecard applied to the 2000/1 PIHS

	Difference between estimate and true value			
		Confidence interval (+/– percentage points)		
Score	Diff.	90-percent	95-percent	99-percent
0–4	+12.9	19.6	22.5	26.9
5–9	+16.8	11.4	13.4	18.0
10–14	+8.1	5.7	6.6	8.3
15–19	–3.5	3.5	4.3	5.7
20–24	–8.5	5.7	5.9	6.5
25–29	–9.6	5.9	6.1	6.5
30–34	–6.9	4.6	4.8	5.2
35–39	–3.9	3.1	3.2	3.7
40–44	–11.0	6.5	6.6	7.0
45–49	–5.0	3.4	3.5	4.1
50–54	–2.0	1.7	1.9	2.3
55–59	–2.5	1.8	1.9	2.2
60–64	–5.8	3.7	3.9	4.2
65–69	–1.1	1.0	1.1	1.2
70–74	–2.9	2.7	3.0	3.4
75–79	+0.8	0.0	0.0	0.0
80–84	–1.1	1.1	1.2	1.5
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

Figure 11 ($1.25/day 2005 PPP line): Differences and precision of differences for bootstrapped estimates of poverty rates for groups of households at a point in time, by sample size, 2005/6 scorecard applied to the 2000/1 PIHS

Sample Size	Difference between estimate and true value			
		Confidence interval (+/– percentage points)		
n	Diff.	90-percent	95-percent	99-percent
1	–3.8	49.8	57.7	74.7
4	–4.4	36.0	43.7	55.7
8	–4.7	26.0	31.2	37.2
16	–4.7	18.1	21.2	27.5
32	–4.9	12.7	14.9	19.8
64	–4.9	8.9	10.2	14.3
128	–5.1	6.4	7.6	9.9
256	–5.2	4.5	5.4	7.0
512	–5.2	3.1	3.7	4.9
1,024	–5.3	2.3	2.7	3.5
2,048	–5.3	1.6	1.9	2.4
4,096	–5.3	1.1	1.3	1.8
8,192	–5.3	0.8	0.9	1.3
16,384	–5.3	0.6	0.7	0.9

Figure 13 ($1.25/day 2005 PPP line): Differences and precision of differences for bootstrapped estimates of changes in group's poverty rates between two points in time, 2005/6 scorecard applied to the 2005/6 validation sample and the 2000/1 PIHS

Sample Size	Difference between estimate and true value			
		Confidence interval (+/– percentage points)		
n	Diff.	90-percent	95-percent	99-percent
1	–5.3	66.2	83.4	106.0
4	–5.6	47.5	57.9	78.1
8	–5.6	31.8	37.8	51.6
16	–5.1	21.9	26.5	36.0
32	–5.1	15.6	19.6	26.4
64	–5.2	11.2	13.3	17.5
128	–5.7	8.1	9.9	13.3
256	–5.8	5.7	6.7	8.7
512	–5.7	4.1	4.9	6.5
1,024	–5.8	3.0	3.5	4.5
2,048	–5.9	2.1	2.5	3.2
4,096	–5.9	1.4	1.7	2.1
8,192	–5.9	1.1	1.2	1.7
16,384	–5.9	0.7	0.8	1.1

Figure 15 ($1.25/day 2005 PPP line): Households by targeting classification and score, along with "Total Accuracy" and BPAC, 2005/6 scorecard applied to the 2000/1 PIHS

Score	Inclusion: < poverty line correctly targeted	Undercoverage: < poverty line mistakenly non-targeted	Leakage: => poverty line mistakenly targeted	Exclusion: => poverty line correctly non-targeted	Total Accuracy Inclusion + Exclusion	BPAC See text
0–4	0.1	26.4	0.0	73.6	73.6	–99.5
5–9	0.3	26.2	0.1	73.5	73.8	–97.8
10–14	1.4	25.1	0.6	73.0	74.4	–87.6
15–19	3.5	23.0	1.7	71.9	75.4	–67.6
20–24	7.3	19.2	4.0	69.6	76.9	–30.0
25–29	12.8	13.7	8.4	65.1	77.9	+28.5
30–34	16.9	9.6	14.1	59.4	76.3	+46.5
35–39	20.1	6.3	21.6	51.9	72.0	+18.1
40–44	22.8	3.7	30.4	43.2	66.0	–14.9
45–49	24.4	2.0	38.5	35.1	59.5	–45.8
50–54	25.2	1.2	45.9	27.6	52.8	–73.9
55–59	25.8	0.6	53.9	19.7	45.5	–104.0
60–64	26.2	0.2	60.2	13.4	39.7	–127.6
65–69	26.4	0.1	64.5	9.1	35.4	–144.0
70–74	26.4	0.0	67.2	6.4	32.8	–154.3
75–79	26.4	0.0	69.9	3.7	30.1	–164.5
80–84	26.4	0.0	71.8	1.8	28.2	–171.6
85–89	26.4	0.0	72.4	1.1	27.6	–174.1
90–94	26.4	0.0	73.3	0.2	26.7	–177.5
95–100	26.4	0.0	73.6	0.0	26.4	–178.4

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

Figure 16 ($1.25/day 2005 PPP line): Households below the poverty line and all households at a given score or at or below a given score cut-off, 2005/6 scorecard applied to the 2000/1 PIHS

Targeting cut-off	% all households who are targeted	% targeted who are poor	% of poor who are targeted	Poor households targeted per non-poor household targeted
0–4	0.1	85.2	0.2	5.8:1
5–9	0.3	77.6	1.0	3.5:1
10–14	1.9	71.1	5.2	2.5:1
15–19	5.1	67.6	13.1	2.1:1
20–24	11.2	64.6	27.5	1.8:1
25–29	21.2	60.2	48.3	1.5:1
30–34	31.0	54.4	63.8	1.2:1
35–39	41.7	48.1	76.0	0.9:1
40–44	53.1	42.8	86.1	0.7:1
45–49	62.9	38.8	92.4	0.6:1
50–54	71.1	35.4	95.4	0.5:1
55–59	79.7	32.4	97.7	0.5:1
60–64	86.4	30.4	99.3	0.4:1
65–69	90.8	29.0	99.7	0.4:1
70–74	93.6	28.2	99.9	0.4:1
75–79	96.3	27.4	99.9	0.4:1
80–84	98.2	26.9	100.0	0.4:1
85–89	98.9	26.7	100.0	0.4:1
90–94	99.8	26.5	100.0	0.4:1
95–100	100.0	26.4	100.0	0.4:1

$2.50/day 2005 PPP Poverty Line Tables

2005/6 Scorecard Applied to 2000/1 PIHS

Figure 9 ($2.50/day 2005 PPP line): Bootstrapped differences between estimated and true household poverty likelihoods with confidence intervals in a large sample (n = 16,384), 2005/6 scorecard applied to the 2000/1 PIHS

	Difference between estimate and true value			
		Confidence interval (+/– percentage points)		
Score	Diff.	90-percent	95-percent	99-percent
0–4	+0.0	0.0	0.0	0.0
5–9	+1.7	2.7	3.3	3.9
10–14	+0.5	0.7	0.7	1.0
15–19	–0.5	0.4	0.4	0.5
20–24	+5.1	1.9	2.3	3.1
25–29	–1.8	1.2	1.2	1.3
30–34	–0.5	0.8	0.9	1.2
35–39	–1.4	1.4	1.6	2.2
40–44	–1.9	1.6	1.7	1.9
45–49	+1.2	1.8	2.2	2.9
50–54	–4.1	3.2	3.4	3.8
55–59	–9.0	5.7	5.9	6.1
60–64	–6.0	4.5	4.8	5.3
65–69	+5.0	3.4	4.1	5.0
70–74	–14.9	9.6	9.9	10.6
75–79	–0.9	4.2	4.9	6.3
80–84	–3.2	3.6	4.4	5.8
85–89	–13.2	11.4	12.1	14.3
90–94	+0.3	2.1	2.5	3.4
95–100	–7.9	11.8	13.0	17.2

Figure 11 ($2.50/day 2005 PPP line): Differences and precision of differences for bootstrapped estimates of poverty rates for groups of households at a point in time, by sample size, 2005/6 scorecard applied to the 2000/1 PIHS

Sample Size	Difference between estimate and true value			
		Confidence interval (+/– percentage points)		
n	Diff.	90-percent	95-percent	99-percent
1	–3.1	41.8	51.3	70.7
4	–1.3	30.5	38.0	51.9
8	–1.6	23.3	27.3	37.5
16	–2.2	16.4	19.8	25.8
32	–2.2	12.0	14.5	18.7
64	–2.5	8.5	10.2	13.3
128	–2.3	6.6	7.7	9.8
256	–2.2	4.4	5.3	6.8
512	–2.3	3.0	3.6	4.6
1,024	–2.2	2.1	2.6	3.4
2,048	–2.2	1.5	1.9	2.5
4,096	–2.2	1.1	1.4	1.8
8,192	–2.2	0.8	0.9	1.2
16,384	–2.2	0.5	0.6	0.8

Figure 13 ($2.50/day 2005 PPP line): Differences and precision of differences for bootstrapped estimates of changes in group's poverty rates between two points in time, 2005/6 scorecard applied to the 2005/6 validation sample and the 2000/1 PIHS

Sample Size	Difference between estimate and true value			
		Confidence interval (+/– percentage points)		
n	Diff.	90-percent	95-percent	99-percent
1	–5.2	65.2	77.1	101.2
4	–2.9	47.5	60.2	79.1
8	–3.2	34.9	42.3	59.0
16	–4.1	26.5	30.6	39.2
32	–4.1	18.9	21.8	28.0
64	–4.1	13.5	15.8	20.3
128	–3.9	9.2	11.2	14.9
256	–3.8	6.5	7.9	10.0
512	–3.9	4.7	5.5	7.5
1,024	–3.9	3.1	3.8	4.9
2,048	–3.9	2.3	2.8	3.5
4,096	–3.9	1.6	1.9	2.7
8,192	–3.9	1.2	1.4	1.8
16,384	–3.9	0.8	1.0	1.3

Figure 15 ($2.50/day 2005 PPP line): Households by targeting classification and score, along with "Total Accuracy" and BPAC, 2005/6 scorecard applied to the 2000/1 PIHS

Score	Inclusion: < poverty line correctly targeted	Undercoverage: < poverty line mistakenly non-targeted	Leakage: => poverty line mistakenly targeted	Exclusion: => poverty line correctly non-targeted	Total Accuracy Inclusion + Exclusion	BPAC See text
0–4	0.1	78.8	0.0	21.2	21.2	–99.8
5–9	0.3	78.5	0.0	21.2	21.5	–99.2
10–14	1.9	76.9	0.0	21.2	23.1	–95.1
15–19	5.1	73.7	0.0	21.1	26.2	–87.1
20–24	11.0	67.8	0.2	20.9	31.9	–71.8
25–29	20.7	58.1	0.5	20.7	41.4	–46.9
30–34	30.1	48.7	0.9	20.3	50.4	–22.4
35–39	40.2	38.7	1.6	19.6	59.8	+3.9
40–44	50.4	28.4	2.7	18.5	68.9	+31.3
45–49	58.6	20.2	4.3	16.9	75.5	+54.2
50–54	64.9	14.0	6.3	14.9	79.8	+72.5
55–59	70.6	8.2	9.1	12.1	82.7	+88.5
60–64	74.6	4.2	11.8	9.4	84.0	+85.0
65–69	76.6	2.3	14.3	6.9	83.5	+81.9
70–74	77.7	1.2	15.9	5.2	82.9	+79.8
75–79	78.3	0.5	17.9	3.2	81.6	+77.2
80–84	78.6	0.2	19.5	1.6	80.3	+75.2
85–89	78.8	0.0	20.1	1.1	79.9	+74.5
90–94	78.8	0.0	20.9	0.2	79.0	+73.4
95–100	78.8	0.0	21.2	0.0	78.8	+73.1

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

Figure 16 ($2.50/day 2005 PPP line): Households below the poverty line and all households at a given score or at or below a given score cut-off, 2005/6 scorecard applied to the 2000/1 PIHS

Targeting cut-off	% all households who are targeted	% targeted who are poor	% of poor who are targeted	Poor households targeted per non-poor household targeted
0–4	0.1	100.0	0.1	Only poor targeted
5–9	0.3	98.4	0.4	63.3:1
10–14	1.9	99.3	2.4	140.1:1
15–19	5.1	99.5	6.5	190.9:1
20–24	11.2	97.9	13.9	45.5:1
25–29	21.2	97.7	26.3	41.6:1
30–34	31.0	97.2	38.2	34.5:1
35–39	41.7	96.3	51.0	25.8:1
40–44	53.1	94.9	63.9	18.6:1
45–49	62.9	93.1	74.4	13.6:1
50–54	71.1	91.2	82.3	10.4:1
55–59	79.7	88.6	89.6	7.8:1
60–64	86.4	86.3	94.6	6.3:1
65–69	90.8	84.3	97.1	5.4:1
70–74	93.6	83.0	98.5	4.9:1
75–79	96.3	81.4	99.4	4.4:1
80–84	98.2	80.1	99.8	4.0:1
85–89	98.9	79.7	99.9	3.9:1
90–94	99.8	79.0	100.0	3.8:1
95–100	100.0	78.8	100.0	3.7:1

$3.75/day 2005 PPP Poverty Line Tables

2005/6 Scorecard Applied to 2000/1 PIHS

Figure 9 ($3.75/day 2005 PPP line): Bootstrapped differences between estimated and true household poverty likelihoods with confidence intervals in a large sample (n = 16,384), 2005/6 scorecard applied to the 2000/1 PIHS

	Difference between estimate and true value			
		Confidence interval (+/– percentage points)		
Score	Diff.	90-percent	95-percent	99-percent
0–4	+0.0	0.0	0.0	0.0
5–9	+0.0	0.0	0.0	0.0
10–14	+0.0	0.0	0.0	0.0
15–19	–0.4	0.2	0.2	0.2
20–24	+0.9	0.8	0.9	1.3
25–29	+0.1	0.1	0.1	0.2
30–34	+0.7	0.5	0.6	0.8
35–39	+0.3	0.8	1.0	1.2
40–44	–0.1	0.4	0.5	0.6
45–49	–1.4	0.9	1.0	1.1
50–54	–0.9	1.0	1.2	1.7
55–59	+0.7	1.5	1.7	2.3
60–64	–3.4	2.7	2.8	3.0
65–69	+5.7	3.1	3.8	4.9
70–74	–7.9	5.6	6.1	6.7
75–79	–12.4	8.3	8.8	9.5
80–84	–0.5	5.6	6.8	8.9
85–89	+5.8	9.5	11.6	14.9
90–94	+4.5	6.2	7.3	9.0
95–100	+10.0	12.7	15.3	19.5

Figure 11 ($3.75/day 2005 PPP line): Differences and precision of differences for bootstrapped estimates of poverty rates for groups of households at a point in time, by sample size, 2005/6 scorecard applied to the 2000/1 PIHS

Sample Size	Difference between estimate and true value			
		Confidence interval (+/– percentage points)		
n	Diff.	90-percent	95-percent	99-percent
1	–0.2	29.3	37.6	55.2
4	–0.1	21.0	27.2	38.0
8	–0.3	15.5	20.6	28.8
16	–0.3	11.4	13.9	21.7
32	–0.3	8.4	10.2	14.1
64	–0.5	5.6	6.9	9.1
128	–0.5	4.1	4.7	6.2
256	–0.4	3.0	3.5	4.7
512	–0.4	2.0	2.5	3.2
1,024	–0.5	1.5	1.8	2.3
2,048	–0.5	1.0	1.2	1.6
4,096	–0.5	0.7	0.9	1.1
8,192	–0.5	0.5	0.6	0.8
16,384	–0.5	0.4	0.4	0.6

Figure 13 ($3.75/day 2005 PPP line): Differences and precision of differences for bootstrapped estimates of changes in group's poverty rates between two points in time, 2005/6 scorecard applied to the 2005/6 validation sample and the 2000/1 PIHS

Sample Size	Difference between estimate and true value			
		Confidence interval (+/– percentage points)		
n	Diff.	90-percent	95-percent	99-percent
1	–1.8	52.9	66.8	83.8
4	–1.0	35.8	43.5	58.7
8	–0.9	26.3	32.1	41.7
16	–0.8	18.3	21.8	33.2
32	–0.9	13.1	16.2	21.4
64	–1.1	9.2	11.0	16.9
128	–1.1	6.5	8.0	10.9
256	–1.0	4.6	5.4	7.8
512	–1.0	3.2	3.8	4.9
1,024	–1.0	2.2	2.7	3.5
2,048	–1.0	1.6	1.9	2.7
4,096	–1.0	1.1	1.3	1.7
8,192	–1.0	0.8	1.0	1.2
16,384	–1.0	0.6	0.7	0.8

Figure 15 ($3.75/day 2005 PPP line): Households by targeting classification and score, along with "Total Accuracy" and BPAC, 2005/6 scorecard applied to the 2000/1 PIHS

Score	Inclusion: < poverty line correctly targeted	Undercoverage: < poverty line mistakenly non-targeted	Leakage: => poverty line mistakenly targeted	Exclusion: => poverty line correctly non-targeted	Total Accuracy Inclusion + Exclusion	BPAC See text
0–4	0.1	92.0	0.0	8.0	8.0	–99.8
5–9	0.3	91.7	0.0	8.0	8.3	–99.3
10–14	1.9	90.1	0.0	8.0	9.9	–95.8
15–19	5.1	86.9	0.0	8.0	13.1	–88.9
20–24	11.2	80.9	0.1	7.9	19.1	–75.6
25–29	21.1	70.9	0.1	7.9	29.0	–54.0
30–34	30.9	61.2	0.2	7.8	38.7	–32.8
35–39	41.4	50.6	0.3	7.7	49.1	–9.6
40–44	52.7	39.4	0.4	7.5	60.2	+15.0
45–49	62.3	29.7	0.6	7.3	69.6	+36.1
50–54	70.1	21.9	1.0	7.0	77.1	+53.5
55–59	77.9	14.1	1.8	6.1	84.0	+71.3
60–64	83.7	8.4	2.7	5.2	88.9	+84.8
65–69	87.1	5.0	3.8	4.2	91.2	+93.3
70–74	89.1	2.9	4.5	3.5	92.6	+95.1
75–79	90.7	1.3	5.6	2.4	93.1	+93.9
80–84	91.6	0.5	6.6	1.3	92.9	+92.8
85–89	91.8	0.2	7.0	0.9	92.8	+92.4
90–94	92.0	0.0	7.7	0.2	92.2	+91.6
95–100	92.0	0.0	8.0	0.0	92.0	+91.4

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

Figure 16 ($3.75/day 2005 PPP line): Households below the poverty line and all households at a given score or at or below a given score cut-off, 2005/6 scorecard applied to the 2000/1 PIHS

Targeting cut-off	% all households who are targeted	% targeted who are poor	% of poor who are targeted	Poor households targeted per non-poor household targeted
0–4	0.1	100.0	0.1	Only poor targeted
5–9	0.3	100.0	0.4	Only poor targeted
10–14	1.9	100.0	2.1	Only poor targeted
15–19	5.1	100.0	5.6	Only poor targeted
20–24	11.2	99.5	12.1	208.0:1
25–29	21.2	99.6	22.9	275.2:1
30–34	31.0	99.5	33.5	199.4:1
35–39	41.7	99.3	45.0	147.8:1
40–44	53.1	99.2	57.2	121.2:1
45–49	62.9	99.0	67.7	98.2:1
50–54	71.1	98.6	76.2	69.5:1
55–59	79.7	97.7	84.6	42.5:1
60–64	86.4	96.9	90.9	30.8:1
65–69	90.8	95.8	94.6	23.0:1
70–74	93.6	95.2	96.8	19.8:1
75–79	96.3	94.2	98.6	16.3:1
80–84	98.2	93.2	99.5	13.8:1
85–89	98.9	92.9	99.8	13.1:1
90–94	99.8	92.2	100.0	11.9:1
95–100	100.0	92.0	100.0	11.6:1