

Chapter 7

Sensitivity Analysis of Poverty PPPs Estimated Using Various Sources of Price Data and Aggregation Methods

Introduction

The last six chapters focused on the development of a conceptual framework and on the methodology and techniques needed to empirically estimate poverty PPPs. As explained in Chapters 4 and 5, several alternatives are available at each stage of the implementation of the basic methodology. This means that a number of alternative estimates of poverty PPPs can be derived through either simple modifications to the methodology or major variations in the type of data used in compiling them. The approach historically in use for this purpose was to employ PPP for the consumption aggregate from the 2005 ICP Asia Pacific to convert the IPL. Although simple, this approach has been criticized since (i) the PPPs from the 2005 ICP Asia Pacific are generally based on price data items that may be of little relevance to the poor; and (ii) the expenditure weights used in computing the PPPs usually represent the average patterns of the whole population and not those of the poor.

The methodology endorsed by the PAG represents an important step in enhancing the relevance of PPPs used for measuring poverty. Implementing the methodology is complex even though it appears to be a simple step to improve the use of consumption PPPs. For instance, there are several steps where choices have to be made in compiling the expenditure share weights for households on the poverty line and in aggregating the price and expenditure share weights. An additional source of

price data, the poverty-specific price surveys, adds another dimension to the options available.

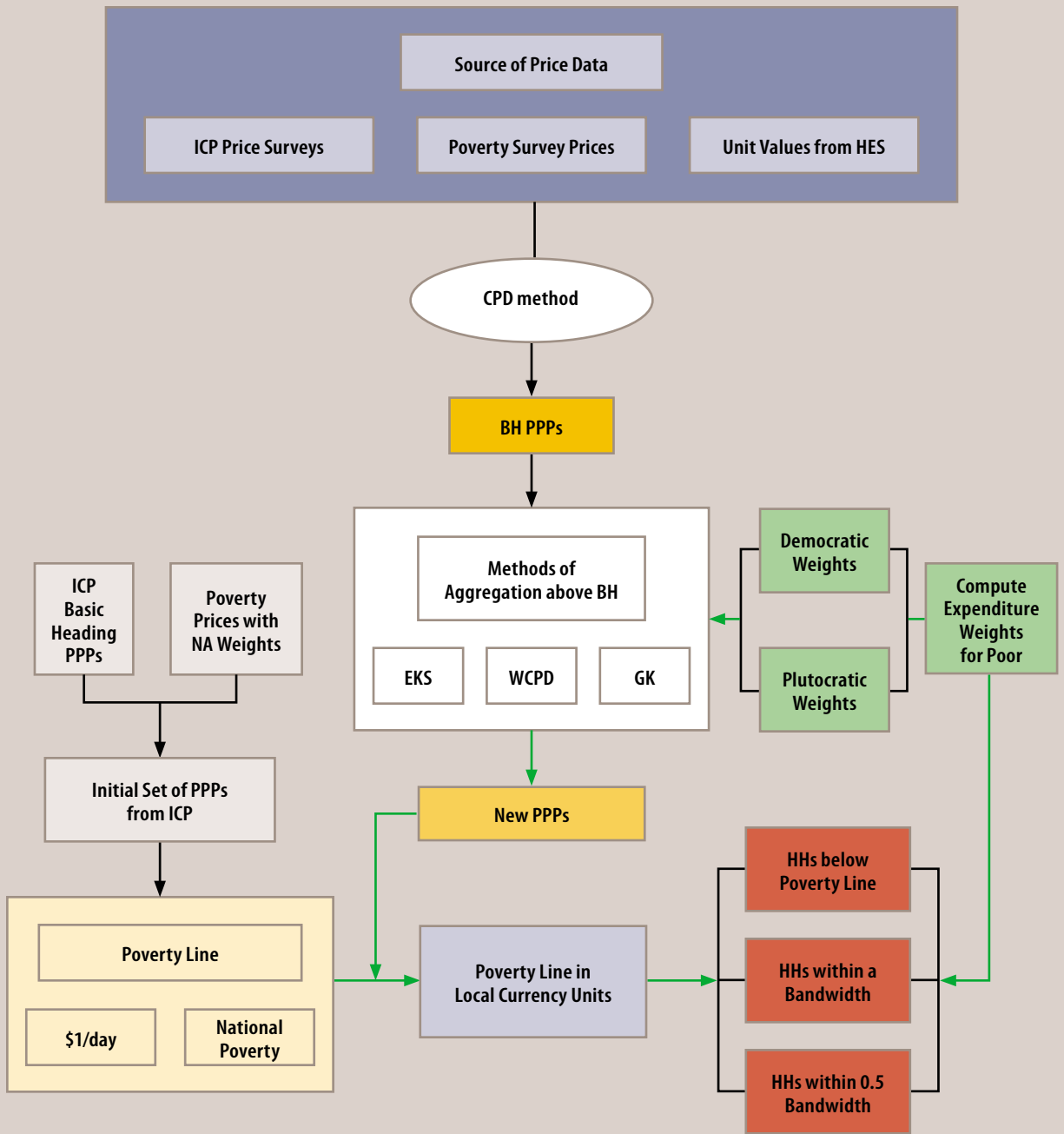
These new sources of prices, and methods available for compiling poverty PPPs represent an exciting array of possibilities. They also offer fertile new ground for research that can result in PPPs that are better suited for measuring poverty. The main objective of this chapter is to present an array of PPP estimates that can be derived from the use of alternative sources of price data, and examine the sensitivity or robustness of the PPP estimates in different scenarios.

Schematic Representation of Approaches and Methods for Compiling PPPs

Chapters 5 and 6 discuss feasible approaches in compiling poverty PPPs. The approaches are presented here in a schematic diagram (Figure 3) outlining the methodology used and indicating alternatives considered at each stage of this poverty PPP study.

The first part of the schematic diagram examines the major components of the methodology and identifies the types of choices confronting a researcher. The second part illustrates the various pathways involved in implementing the iterative scheme.

Figure 3. A Schematic Diagram for the Computation of Poverty Purchasing Power Parities



PPP = purchasing power parity; CPD = country-product-dummy; EKS = Eltető-Kölvés-Szulc; GK = Geary-Khamis; HH = household; HES = household expenditure survey; ICP = International Comparison Program; NA = national accounts; WCPD = weighted country-product-dummy.

Major Components of the Computational Scheme

Sources of Price Data. Three major sources of price data are identified in the report.

- (i) The first source is the 2005 ICP Asia Pacific. Extensive price surveys were conducted in all the participating countries to collect prices for an exhaustive product list. In this source, 656 items were in the product list for the consumption aggregate, which is the most relevant aggregate for computing the poverty PPP. The participating countries provided the estimated average national prices for all items priced in their countries. Chapter 3 of this report and Part 3 of ADB (2007b) give further details of the methods used in collecting prices.
- (ii) The second source of price data is the poverty-specific price surveys, conducted specifically for the purpose of collecting prices of goods and services that were considered representative of the purchases of the poor, and coming from outlets used mainly by the poor. Details of poverty-specific price surveys conducted as part of the poverty PPP study are in Chapter 6. This type of survey was designed and conducted for the first time as part of the 2005 ICP Asia Pacific.
- (iii) Another source of price data is the HES conducted regularly in the participating countries. In addition to data on household expenditure, surveys in some countries are designed in a way that makes it feasible to compute unit values for consumption items listed in the HES. To compute unit values, it is necessary to have information on expenditure for a commodity as well as total quantity of the commodity. Unit values are useful because they can be measured for each household and, therefore, can be used in studying unit values paid by poor households. However, unit values have limitations. The practical issues encountered in measuring and comparing unit values with prices collected through poverty-specific price surveys are discussed in detail in Chapter 6.

In the current poverty PPP study, only the first two sources of data are explored. The use of unit values must be explored in future rounds of the ICP.

Irrespective of which source of price data is used, the ultimate aim is to compile a set of PPPs at the basic heading level.

Aggregation Methods. The CPD is the recommended method for computing PPPs at the basic heading level. For purposes of aggregating basic heading PPPs to yield poverty PPPs, the three most commonly used methods are the EKS, weighted CPD, and GK methods, as described in Chapter 5.

Compilation of Expenditure Share Weights. Expenditure share weights together with basic heading PPPs provide all the information necessary to implement any one of the selected aggregation methods. Six steps are involved in compiling the expenditure share weights for the poor. “Poor households” may refer to households around the poverty line—this is the most relevant concept if one wishes to compile PPPs for converting poverty lines. Alternatively, poor households may refer to all households below the poverty line. The steps described below provide an alternative exposition of the discussion in Chapter 5.

Step 1. Select the poverty line.

The first step in the process is to select a poverty line for the purpose of identifying the appropriate households to use in compiling expenditure share weights. Results would be sensitive to the choice of the poverty line. In this study, two alternative poverty lines were considered.

The first was the poverty line of \$1/day used in 1993 (which is actually \$1.08) updated to 2005 using the CPI in the United States. The main rationale was that if \$1.08 was considered an appropriate IPL in 1993 for purposes of creating international awareness, then updating it using the US CPI would serve to maintain the same level of awareness about the purchasing power of the poverty line in the developed world.

The second poverty line used was the poverty line of Indonesia, expressed in Indonesian rupiah. Indonesia is a large country with reliable HES. In addition, the country conducts poverty studies on a regular basis. In the process of deciding on the

second poverty line, India had been considered as an alternative. However, because India did not have a single national poverty line, it was decided to use the Indonesian poverty line.

Step 2. Select PPPs for converting the selected poverty line into local currency units.

To be able to identify the poor households for the purpose of compiling expenditure weights, it was necessary to convert the poverty line selected in Step 1 into the respective local currency units. This is the starting point for the iterative process. The PPPs selected at this stage are used in identifying the poor households and their expenditure patterns, which, in turn, are used in recomputing PPPs for the next loop in the iterative process (indicated with green arrows in Figure 3).

Two approaches are considered for this purpose. Following the PAG methodology, basic heading PPPs from the 2005 ICP Asia Pacific are considered as one alternative. The other is the set of basic heading PPPs computed using poverty-specific price survey data. (Chapter 6 gives details on poverty-specific price surveys and a comparison of ICP and poverty-specific price survey basic heading PPPs.)

Step 3. Convert the selected poverty line into local currency units.

This is a simple intermediate step. The selected poverty line is converted into local currency units using PPPs selected in Step 2.

Step 4. Identify the poor households for the compilation of expenditure weights.

Three sets of households are considered for this purpose. The first set is comprised of households below the poverty line. This approach however, is inappropriate when the PPPs are being compiled mainly for converting poverty lines. An alternative is to consider households with expenditures near the poverty line. For this purpose an optimal bandwidth is determined using Kernel smoothing techniques. Once the bandwidth is determined, two sets of households are identified. The first is within the bandwidth that is half the width on either side. The second set is within double the bandwidth, i.e., with one bandwidth on either side of the poverty line. Obviously, the wider the bandwidth, the larger the

number of households included in the computation, but it will also mean households with expenditures that can deviate from the poverty line will be included. In all, three sets of households are identified for computing expenditure share weights.

Step 5. Compute the average expenditure share weights for the poor.

Once the households are identified, average household expenditure share weights for each set of households are computed using the democratic or plutocratic weighting scheme. These concepts are explained in Chapter 5.

Step 6. Compute a new set of PPPs with the use of the expenditure share weights of the poor.

The basic heading PPPs, either from the 2005 ICP Asia Pacific or from poverty-specific price survey data, are then combined with expenditure share patterns of the poor using one of the three aggregation methods (EKS, GK, or the weighted CPD) to yield a set of poverty PPPs.

The new PPPs from Step 6 replace the initial set of PPPs used in Step 2 of the iterative scheme. Repeat Steps 3 to 6 using the newly derived set of PPPs at each stage. The iterative scheme is terminated when the PPPs from the new stage are the same as the PPPs from the previous step.

Note that in the iterative scheme, the PPPs generally tend to converge rapidly. In fact, after the first step of the iteration, changes appear to be marginal. In the empirical analysis conducted here convergence was achieved within the first five steps. However, some oscillatory behavior in PPPs was observed in certain cases, but the differences between oscillations tended to be small and the iterative scheme in such cases was terminated once the oscillatory behavior was observed.

Taking note of all the choices available at different stages of the process, a total of 72 (2 initial sets of PPPs computed from 2 different price sources x 2 poverty lines x 3 sets of poor households x 2 types of expenditure share weights x 3 methods of aggregation) sets of PPPs are computed as part of the sensitivity analysis to be conducted. These are discussed in the following section. Not all the aggregation methods

were used in the computations for all the choices made at the intermediate stages. Therefore, the actual sets of PPPs presented below are the maximum of 72.

The remaining part of this chapter discusses the sensitivity of the PPP estimates to the different choices made at different stages.

PPPs Computed Using the PAG Methodology

The PAG methodology recommends that the consumption PPPs from the ICP be selected as the main source of prices. These basic heading PPPs were combined with appropriate expenditure share weights for the poor, and the EKS method was used for aggregating basic heading PPPs.

In implementing the PAG methodology, however, it is necessary to make selections at three different stages. These choices are required for the purpose of compiling expenditure share weights for the poor.

- (i) First, it is necessary to start with a poverty line. Two options are considered. The first is \$1.08/day IPL (in 1993) after an adjustment is made for temporal movements. The resulting poverty line is \$1.46, which, after being converted into Malaysian ringgit using the latest ICP Global and ICP Asia Pacific results, becomes RM3.08/day. The second poverty line is the Indonesian poverty line, which is rupiah (Rp) 1,549,296/annum.³³ (The choice would obviously influence the result. In particular, it would keep the population of the poor fixed for Indonesia in the international comparisons. This issue is considered further in the last section.)
- (ii) Second, it is necessary to decide which segment of the poor population to consider for the purpose of computing average budget shares. Here three sets of households were experimented with: (i) all households below the poverty line; (ii) all households within “h” from the poverty line, i.e., all households within $\pm h$ around the poverty line; and (iii) all households within $\pm 0.5h$ around the poverty line. Results from the

three sets of households are computed and presented.

- (iii) Finally, once the set of households is identified, then the average budget shares need to be computed. The choice is to use either democratic or plutocratic weights. The results presented are for average shares based on democratic weights. The choice implies that all the households in the set are given equal weight irrespective of their total expenditure. This is particularly useful when households around the poverty line are considered.

Table 24 presents the PPPs computed using the PAG-recommended methodology.

Columns (1) to (5) present the PPPs for the currencies of the 16 countries participating in the study. All the PPPs are expressed relative to the reference currency computed using the EKS aggregation method. The PPPs here satisfy the transitivity property. Therefore, the relativities between different currencies will remain unchanged when the reference currency is changed. Column (1) presents consumption taken from ADB (2007b).³⁴ PPPs based on the US\$ poverty line and the Indonesian poverty line are presented in columns (2) to (5). Three sets of the poor, i.e., all those under the poverty line; those within $\pm h$ of the poverty line; and those within $\pm 0.5 h$ of the poverty line are presented in columns (2) to (4). For the Indonesian poverty line, only results for the poor within $\pm h$ of the poverty line are presented.

As shown in columns (10) to (12), the differences between columns (2) to (4) are small, generally less than 1% within each other. Note that PPPs in column (4), based on expenditure shares of households within $\pm 0.5h$ of the poverty line, are higher than those presented in columns (2) and (3), although the differences remain generally below 1%. This pattern does not seem to be present in other scenarios considered here. Further, some computational problems in terms of nonconvergence were encountered when households within $\pm 0.5 h$ of the poverty line were considered. The nonconvergence was not considered serious as it reflected a tendency to vary within a small band (usually around the

³³ This poverty line was provided by the Indonesian representative from Badan Pusat Statistik.

³⁴ Unless otherwise stated, consumption here means household final consumption expenditure.

fourth significant digit). For example, after several iterations, nonconvergence varied between 11.999 and 12.002 in the case of Bangladesh. In such cases it was decided to take the average of the values over the last four iterations. The results indicate that the choice of the interval around the poverty line may not make a significant difference in PPPs.³⁵

In the discussion that follows and in the tables, only PPPs based on expenditure share weights for the poor households within h from either side of the poverty line are considered.

Therefore, columns (3) and (5) represent the PPPs generated using the PAG methodology

³⁵ To be able to make comments about the statistical significance of the differences, it is necessary to estimate standard errors associated with the PPPs presented here. Deaton (2007) and O'Donnell and Rao (2007) considered this issue, but Deaton's approach for the computation of standard errors appears to be more complete. However, these methods have not been developed enough to make their application suitable.

but using two different poverty lines. One poverty line is equivalent to RM3.08 (equal to \$1.46) and the other is Rp1,549,296. The difference between columns (3) and (5) is again fairly small, indicating the robustness of the PPPs to variations in the choice of the underlying poverty line.

The purpose of Table 24 is to show the difference between the ICP consumption PPPs, which were used for converting the IPL since 1990, and the PPPs based on the PAG-recommended methodology. If attention is focused on the differences between columns (1) and (3) shown in column (7), and between columns (1) and (5) shown in column (9), it appears that applying the PAG methodology generates PPPs that are significantly different from the ICP consumption PPPs. The direction of the difference is not uniform across the 15 countries in the table. The largest declines in PPPs under the PAG methodology compared with the ICP consumption PPPs shown in column (7) are evident in the case of Fiji Islands (10.14%), Maldives (8.82%), Thailand (5.88%), and

Table 24. Poverty PPPs: PAG Methodology, 2005 (local currency units per Malaysian ringgit)

Country	Poverty PPPs				
	ICP Consumption PPP	US\$ Poverty Line			Indonesia Poverty Line
		< Poverty Line	$\pm h$ of the Poverty Line	$\pm 0.5h$ of the Poverty Line	$\pm h$ of the Poverty Line
			(1)	(2)	(3)
Malaysia	1.000	1.000	1.000	1.000	1.000
Bangladesh	12.06	11.88	11.95	12.00	11.85
Bhutan	8.733	8.474	8.641	8.694	8.494
Cambodia	764.0	780.2	795.6	798.7	781.4
Fiji Islands	0.732	0.650	0.658	0.657	0.647
India	7.379	7.534	7.440	7.465	7.497
Indonesia	1,983	1,990	2,002	2,008	1,987
Lao People's Democratic Republic	1,770	1,899	1,874	1,884	1,891
Maldives	4.606	4.150	4.200	4.225	4.145
Mongolia	247.1	239.9	241.2	241.9	238.7
Nepal	12.52	12.07	12.22	12.24	12.00
Pakistan	9.796	9.782	9.679	9.703	9.744
Philippines	11.44	11.02	11.14	11.18	10.98
Sri Lanka	18.94	17.87	17.96	18.08	17.83
Thailand	8.261	7.773	7.775	7.803	7.816
Viet Nam	2,800	2,756	2,794	2,803	2,752

PPP = purchasing power parity; ICP = International Comparison Program; PAG = Poverty Advisory Group.

Sri Lanka (5.16%). The biggest increases are recorded for Lao PDR (5.90%) and Cambodia (4.14%). The change represents a small increase in PPPs under the new methodology.

The data from Table 24 indicate that the new methodology brings about significant changes in PPPs used for conversion. The PPPs show a certain degree of robustness to different approaches to identifying the poor households for the purpose of computing expenditure share weights as well as to the choice of the underlying poverty line.

PPPs Computed with the Use of Poverty-Specific Price Survey Data and Expenditure Weights of the Poor

This section presents PPPs from the poverty-specific price survey data as an alternative to the general ICP price data. Thus the results presented deviate one step further from the PAG-recommended

methodology and two steps away from the conventional use of consumption PPPs from the ICP.

Table 25 presents PPPs where the price data come from the poverty-specific price surveys. Otherwise all the other details are exactly the same as those for the PAG methodology discussed in the preceding section. Some salient features of Table 25 are presented here.

The poverty PPPs are robust to the set of households identified as poor and to the use of the IPL and the Indonesian poverty line expressed in Malaysian ringgit. This is confirmed by PPPs in columns (3) and (5) for the two poverty lines. Differences between the estimates are less than 1 percentage point and within the realms of statistical errors associated with these PPPs. Similarly, a comparison of PPPs in columns (2) to (4), respectively, based on all households below the poverty line; households within an interval h from the poverty line; and households within an interval of $0.5 h$ from the poverty line, shows that all are close to each other. However, PPPs in column (4) are

Table 24. Poverty PPPs: PAG Methodology, 2005 (local currency units per Malaysian ringgit) (continued)

Percent Difference between Poverty PPPs and the ICP Consumption PPPs				Percent Difference among Poverty PPPs based on the US\$ Poverty Line		
US\$ Poverty Line			Indonesia Poverty Line			
< Poverty Line	$\pm h$ of the Poverty Line	$\pm 0.5h$ of the Poverty Line	$\pm h$ of the Poverty Line	< Poverty Line vs. Band of $\pm h$	< Poverty Line vs. Band of $\pm 0.5h$	Band of $\pm h$ vs. Band of $\pm 0.5h$
(6)	(7)	(8)	(9)	(10)	(11)	(12)
(2)/(1)	(3)/(1)	(4)/(1)	(5)/(1)	(3)/(2)	(4)/(2)	(4)/(3)
(1.50)	(0.88)	(0.49)	(1.77)	0.63	1.03	0.40
(2.96)	(1.05)	(0.46)	(2.74)	1.97	2.59	0.61
2.12	4.14	4.54	2.28	1.98	2.37	0.38
(11.26)	(10.14)	(10.28)	(11.67)	1.26	1.10	(0.15)
2.10	0.82	1.16	1.59	(1.25)	(0.91)	0.34
0.36	0.94	1.25	0.21	0.57	0.89	0.31
7.31	5.90	6.46	6.84	(1.31)	(0.79)	0.52
(9.90)	(8.82)	(8.25)	(10.00)	1.20	1.82	0.62
(2.93)	(2.40)	(2.11)	(3.41)	0.54	0.85	0.30
(3.61)	(2.39)	(2.23)	(4.18)	1.27	1.43	0.16
(0.14)	(1.20)	(0.95)	(0.54)	(1.06)	(0.81)	0.25
(3.66)	(2.61)	(2.26)	(4.02)	1.09	1.45	0.35
(5.63)	(5.16)	(4.54)	(5.86)	0.49	1.15	0.66
(5.90)	(5.88)	(5.54)	(5.39)	0.03	0.38	0.35
(1.57)	(0.22)	0.11	(1.71)	1.37	1.71	0.33

lower than those in column (3) for all countries. The differences, however, are small.

The main feature of Table 25 is the difference between the PPPs conventionally used (consumption PPPs from the ICP) and PPPs based on poverty-specific price survey data aggregated using expenditure weights of the poor. Column (7) shows percentage differences between columns (1) and (3). Interestingly, the differences between the columns are significant, whether they are positive or negative, except for the Maldives. In most cases, the poverty PPPs based on poverty price survey data are significantly lower than the consumption PPPs. The margin is biggest for Indonesia (19.63%) followed by Viet Nam (15.99%), then Bangladesh and Sri Lanka (both at 15.69%).

The only countries that show an increase in PPPs are the Philippines (9.31%) followed by Lao PDR (7.69%), Cambodia (5.74%), Mongolia (3.07%),

and Maldives (0.30%). On the other hand, the PPP for India decreased by 12.73%, a significant decrease in the PPP value that can have a significant influence on the estimates of poverty incidence.

In the discussion of the likely effects of poverty-specific price survey data, it was mentioned that there was no *a priori* expectation as to which direction the final PPPs may move from the conventional consumption PPPs. Where the PPPs declined, the indication is that the poverty prices in those countries are lower relative to the prices paid by the poor in Malaysia. Similarly, in countries like Cambodia, the prices paid by the poor, relative to the rest of the population, are higher than the prices paid by the poor relative to the rest in Malaysia. This phenomenon is likely to occur in low-income countries where the prices paid by the poor and the general population are similar as the population in general is poor. This explanation appears to be plausible as the increases are mainly evident in low-income countries like

Table 25. Poverty PPPs: Poverty-Specific Price Data, 2005
(local currency units per Malaysian ringgit)

Country	ICP Consumption PPP	Poverty PPPs			
		US\$ Poverty Line			Indonesia Poverty Line
		< Poverty Line	±h of the Poverty Line	±0.5h of the Poverty Line	±h of the Poverty Line
(1)	(2)	(3)	(4)	(5)	
Malaysia	1.000	1.000	1.000	1.000	1.000
Bangladesh	12.06	10.14	10.17	10.18	10.19
Bhutan	8.733	8.169	8.244	8.261	8.204
Cambodia	764.0	784.6	807.9	811.9	800.5
Fiji Islands	0.732	0.649	0.671	0.672	0.667
India	7.379	6.441	6.440	6.469	6.479
Indonesia	1,983	1,569	1,594	1,599	1,588
Lao People's Democratic Republic	1,770	1,934	1,906	1,914	1,920
Maldives	4.606	4.471	4.619	4.649	4.582
Mongolia	247.1	255.9	254.7	255.2	256.0
Nepal	12.52	11.88	11.81	11.85	11.83
Pakistan	9.796	9.063	9.033	9.046	9.064
Philippines	11.44	12.55	12.50	12.53	12.54
Sri Lanka	18.94	15.96	15.97	16.04	16.01
Thailand	8.261	7.197	7.176	7.182	7.207
Viet Nam	2,800	2,341	2,352	2,360	2,356

PPP = purchasing power parity; ICP = International Comparison Program.

Cambodia, Lao PDR, Mongolia, and in, what may be an exception, Philippines.

Data from Table 25 point to the conclusion that the use of poverty-specific price survey data has resulted in significant changes to PPPs and the direction of change is related to the income level of the countries involved. This conclusion, in turn, implies that application of the new PPPs based on poverty-specific price survey data is likely to alter the estimates of poverty incidence. Countries like Cambodia, Lao PDR, and Mongolia will show a significantly higher level of poverty incidence.

Comparison of PPPs from the PAG Methodology and Poverty-Specific Price Survey Data

The next question to explore is, how much difference does it make to PPPs if the PAG

methodology is modified and poverty-specific price survey data are used in place of ICP price data? If the difference is negligible, then the main focus of future work would be in the refinements associated with implementing the PAG methodology. However, if the differences turn out to be significant, then it would be necessary to focus attention on improving the poverty-specific price survey methodology and framework further. Table 26 provides all the necessary information to examine this important question.

Column (1) presents the consumption PPPs from the 2005 ICP Asia Pacific that would have been used if the standard practice of the last two decades were continued. These are the PPPs that the World Bank would have used in converting the IPL. There are two other sets of PPPs that incrementally differ from the consumption PPPs from the ICP. Columns (2) and (4) show new sets of PPPs derived using the methodology recommended by the PAG for this round. The only difference is that column (2) is based on the \$1/day IPL and column (4) is based

Table 25. Poverty PPPs: Poverty-Specific Price Data, 2005
(local currency units per Malaysian ringgit) (continued)

Percent Difference between Poverty PPPs and the ICP Consumption PPPs				Percent Difference among Poverty PPPs based on the		
US\$ Poverty Line			Indonesia Poverty Line	US\$ Poverty Line		
< Poverty Line	±h of the Poverty Line	±0.5h of the Poverty Line	±h of the Poverty Line	< Poverty Line vs. Band of ±h	< Poverty Line vs. Band of ±0.5h	Band of ±h vs. Band of ±0.5h
(6)	(7)	(8)	(9)	(10)	(11)	(12)
(1) / (2)	(1) / (3)	(1) / (4)	(1) / (5)	(2) / (3)	(2) / (4)	(3) / (4)
(15.89)	(15.69)	(15.55)	(15.51)	0.24	0.41	0.17
(6.46)	(5.60)	(5.41)	(6.06)	0.92	1.12	0.20
2.69	5.74	6.27	4.77	2.97	3.49	0.50
(11.39)	(8.32)	(8.17)	(8.90)	3.46	3.62	0.16
(12.72)	(12.73)	(12.33)	(12.20)	(0.01)	0.44	0.46
(20.86)	(19.63)	(19.39)	(19.93)	1.55	1.85	0.30
9.30	7.69	8.16	8.49	(1.47)	(1.04)	0.44
(2.92)	0.30	0.93	(0.52)	3.32	3.97	0.63
3.55	3.07	3.27	3.60	(0.46)	(0.27)	0.19
(5.11)	(5.68)	(5.36)	(5.46)	(0.60)	(0.26)	0.35
(7.49)	(7.80)	(7.66)	(7.48)	(0.33)	(0.19)	0.15
9.76	9.31	9.57	9.67	(0.41)	(0.17)	0.24
(15.75)	(15.69)	(15.32)	(15.49)	0.07	0.50	0.43
(12.87)	(13.13)	(13.06)	(12.75)	(0.29)	(0.21)	0.08
(16.39)	(15.99)	(15.71)	(15.85)	0.48	0.80	0.33

on the poverty line used in Indonesia. Note that differences in PPPs in columns (2) and (4), shown in column (10), are small and insignificant, indicating a certain degree of robustness to the specification of the poverty line.

The rest of the discussion in this section will focus on the PPPs based on the arbitrarily selected IPL. (This is the poverty line extrapolated from \$1.08/day in 1993 using price movements in the US and then converting them to Malaysian ringgit using the latest ICP results reported by the Global Office at the World Bank.)

PPPs in column (3) go a step further from the PAG-recommended methodology. In addition to using expenditure share weights of the poor, these PPPs make use of prices from poverty-specific price surveys conducted in the 16 participating countries specifically for examining the likely effect of replacing price data from the ICP with that in the poverty-specific price surveys. So a comparison

of columns (2) and (3) will provide an indication of the likely effect of changing the source of price data from the ICP. A comparison of PPPs in columns (2) and (3), and also columns (4) and (5), reveal significant differences between the two sets of PPPs. The percentage differences between column (2) and column (3), shown in column (8), indicate that the differences are large and significant, but the direction is not uniform. The poverty-specific price survey PPPs (column 3) are lower than PPPs based on PAG methodology for Indonesia (20.38%), Viet Nam (15.8%), Bangladesh (14.94%), India (13.44%), and Sri Lanka (11.10%) followed by other countries. PPPs based on the poverty-specific price survey data are higher in Philippines (12.23%), Maldives (10.00), and Mongolia (5.61%). The other conclusion that can be drawn is that the use of poverty-specific price survey data has significantly affected the PPPs for converting poverty lines.

The percentage differences in pairs of PPPs are presented in columns (6) to (11). A comparison

Table 26. Poverty PPPs: 2005 ICP Asia Pacific, PAG Methodology, and Poverty-Specific Price Survey Data, 2005 (local currency units per Malaysian ringgit)

Country	ICP Consumption PPP (1)	Poverty PPPs			
		US\$ Poverty Line		Indonesia Poverty Line	
		PAG (2)	Poverty Survey (3)	PAG (4)	Poverty Survey (5)
Malaysia	1.000	1.000	1.000	1.000	1.000
Bangladesh	12.06	11.95	10.17	11.85	10.19
Bhutan	8.733	8.641	8.244	8.494	8.204
Cambodia	764.0	795.6	807.9	781.4	800.5
Fiji Islands	0.732	0.658	0.671	0.647	0.667
India	7.379	7.440	6.440	7.497	6.479
Indonesia	1,983	2,002	1,594	1,987	1,588
Lao People's Democratic Republic	1,770	1,874	1,906	1,891	1,920
Maldives	4.606	4.200	4.619	4.145	4.582
Mongolia	247.1	241.2	254.7	238.7	256.0
Nepal	12.52	12.22	11.81	12.00	11.83
Pakistan	9.796	9.679	9.033	9.744	9.064
Philippines	11.44	11.14	12.50	10.98	12.54
Sri Lanka	18.94	17.96	15.97	17.83	16.01
Thailand	8.261	7.775	7.176	7.816	7.207
Viet Nam	2,800	2,794	2,352	2,752	2,356

PPP = purchasing power parity; ICP = International Comparison Program; PAG = Poverty Advisory Group.

of columns (6) and (7) suggests that the poverty-specific price surveys (in column 3) deviate from ICP PPPs (column 1) by a larger margin than the margin by which PAG methodology-based PPPs (column 2) deviate from ICP PPPs. These results suggest that the use of poverty survey data had a bigger effect than the effect induced by a shift from the use of national income weights to poverty weights. The use of poverty-specific price survey data resulted in a significant decline in PPPs for countries like India, and this could be due to the ability of the poverty-specific price survey data to more accurately reflect the prices paid by the poor through the inclusion of items like subsidized rice and wheat. There are some exceptions like Fiji Islands and Lao PDR where the use of expenditure shares of the poor captured most of the effect. This is mainly due to the fact that the ICP prices paid by the general population, and poverty-specific survey price data (representing the prices paid by the poor) are very similar.

The main finding in this section is that the use of price data from poverty-specific price surveys resulted in a bigger change than just the replacement of weights by the expenditure weights of the poor in computing the poverty PPPs. The result provides some indication that the ICP products may not be a good proxy for the goods and services used by the poor. The effect could be significant. In the case of low-income countries where the differences in type and quality of goods and services consumed by the poor and the general population are likely to be less pronounced, the use of poverty-specific price surveys is likely to make only a marginal difference compared with the difference generated by the use of weights representing the expenditure patterns of the poor.

Table 26. Poverty PPPs: 2005 ICP Asia Pacific, PAG Methodology, and Poverty-Specific Price Survey Data, 2005 (local currency units per Malaysian ringgit) (continued)

Percent Difference					
ICP vs. Poverty PPP		PAG vs. Poverty Survey		US vs. Indonesia Poverty Line	
ICP vs. PAG	ICP vs. Poverty Survey	US\$ Poverty Line	Indonesia Poverty Line	PAG	Poverty Survey
(6)	(7)	(8)	(9)	(10)	(11)
(1) and (2)	(1) and (3)	(2) and (3)	(4) and (5)	(2) and (4)	(3) and (5)
(0.88)	(15.69)	(14.94)	(13.99)	(0.89)	0.22
(1.05)	(5.60)	(4.59)	(3.41)	(1.70)	(0.49)
4.14	5.74	1.54	2.44	(1.79)	(0.92)
(10.14)	(8.32)	2.03	3.13	(1.70)	(0.64)
0.82	(12.73)	(13.44)	(13.58)	0.76	0.61
0.94	(19.63)	(20.38)	(20.10)	(0.72)	(0.37)
5.90	7.69	1.69	1.54	0.89	0.74
(8.82)	0.30	10.00	10.54	(1.30)	(0.82)
(2.40)	3.07	5.61	7.25	(1.03)	0.51
(2.39)	(5.68)	(3.38)	(1.34)	(1.83)	0.23
(1.20)	(7.80)	(6.68)	(6.98)	0.67	0.34
(2.61)	9.31	12.23	14.26	(1.45)	0.33
(5.16)	(15.69)	(11.10)	(10.22)	(0.74)	0.24
(5.88)	(13.13)	(7.71)	(7.78)	0.52	0.44
(0.22)	(15.99)	(15.80)	(14.39)	(1.49)	0.16

Effect of Democratic Weights versus Plutocratic Weights

Table 27 presents the PPPs computed using democratic and plutocratic weights for aggregating the expenditure weights of households around the poverty line. The main difference is that democratic weights give equal importance to all the households in the set whereas plutocratic weights accord weights relative to the size of the household expenditure. In Chapter 5, the use of democratic weights was preferred to plutocratic weights. For a number of alternative scenarios, PPPs were computed using both systems of weights. There is very little difference generated by and between the two approaches, hence the choice here is almost inconsequential. Therefore, the use of democratic weights, which give equal weight to all households, may be recommended.

Sensitivity of PPP Estimates to the Choice of Aggregation Method

All the PPPs presented in Tables 24 to 27 are computed using the EKS method of aggregation described in Chapter 5. However, several alternative methods of aggregation are available for this purpose. The GK method was used in earlier rounds of the ICP until 1985, and is still used in the construction of the Penn World Tables.³⁶ For computing PPPs, the weighted CPD method based on a generalization of the CPD method using weights in the regression estimation was considered by Deaton (2006) and Rao and O'Donnell (2004). Table 28 presents PPP estimates generated using the EKS, GK, and weighted CPD methods of aggregation.

³⁶The PPPs in the 2005 ICP Asia Pacific provides results generated using the GK method (see ADB 2007b, Appendix 6).

Table 27. Poverty PPPs: Democratic and Plutocratic Weights, 2005
(local currency units per Malaysian ringgit)

Country	US\$ Poverty Line			
	ICP Basic Headings PPPs			
	Below Poverty Line		Within \pm h of Poverty Line	
	Democratic	Plutocratic	Democratic	Plutocratic
	(1)	(2)	(3)	(4)
Bangladesh	11.88	11.86	11.95	11.95
Bhutan	8.474	8.486	8.641	8.640
Cambodia	780.2	781.5	795.6	795.6
Fiji Islands	0.650	0.651	0.658	0.659
India	7.534	7.380	7.440	7.316
Indonesia	1,990	1,991	2,002	2,002
Lao People's Democratic Republic	1,899	1,892	1,874	1,873
Malaysia	1.000	1.000	1.000	1.000
Maldives	4.150	4.138	4.200	4.206
Mongolia	239.9	239.4	241.2	241.2
Nepal	12.07	12.06	12.22	12.21
Pakistan	9.782	9.752	9.679	9.673
Philippines	11.02	11.01	11.14	11.14
Sri Lanka	17.87	17.86	17.96	17.94
Thailand	7.773	7.769	7.775	7.772
Viet Nam	2,756	2,756	2,794	2,793

PPP = purchasing power parity; ICP = International Comparison Program.

Results reported in columns (1) to (3), which make use of ICP prices and poverty weights, i.e., the PAG methodology, show that PPPs from the weighted CPD appear to be lower than PPPs from the EKS and GK methods, with a couple of exceptions. In most cases, the weighted CPD PPPs are closer to those generated by the EKS. A notable feature of the results is that the GK PPPs for some low-income countries like Viet Nam, Lao PDR, and Bangladesh are higher than the EKS PPPs. This result does not support the general criticism leveled against the use of the GK method—that GK parities are lower for low-income countries, thus overstating the real income or expenditure.

The results are more mixed when poverty-specific survey price data are used. It appears that the EKS and weighted CPD methods generate PPPs that are close to each other, which in turn differ from the GK-based PPPs. These results clearly indicate the need to further explore the issue of choice of the appropriate aggregation methodology.

Sensitivity of Estimates of Poverty Incidence

Attention so far has focused on the robustness of PPP estimates to different sources of price data, to different expenditure weights, and, finally, to the use of different aggregation methods. In this section, the effect of the use of different poverty lines to generate PPPs and the effect of different sources of price data on the estimates of poverty incidence are discussed. Table 29 presents estimates of poverty incidence computed using PPPs generated from different sources of price data and two different poverty lines.

The top panel of Table 29 focuses on estimates generated when the IPL is used. The main point of interest here is that the estimates of poverty incidence are fairly robust and insensitive to variations in identifying the poor and to the use of democratic or plutocratic weights. These results are consistent with the sensitivity results reported and discussed earlier.

Table 27. Poverty PPPs: Democratic and Plutocratic Weights, 2005
(local currency units per Malaysian ringgit) (continued)

US\$ Poverty Line				Indonesia Poverty Line			
Poverty Basic Headings PPPs				ICP Basic Headings PPPs		Poverty Basic Headings PPPs	
Below Poverty Line		Within $\pm h$ of Poverty Line		Within $\pm h$ of Poverty Line			
Democratic	Plutocratic	Democratic	Plutocratic	Democratic	Plutocratic	Democratic	Plutocratic
(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
10.14	10.14	10.17	10.16	11.85	11.82	10.19	10.18
8.169	8.169	8.244	8.243	8.494	8.483	8.204	8.202
784.6	786.7	807.9	807.2	781.4	779.4	800.5	800.0
0.649	0.655	0.671	0.672	0.647	0.647	0.667	0.667
6.441	6.417	6.440	6.413	7.497	7.313	6.479	6.436
1,569	1,575	1,594	1,596	1,987	1,985	1,588	1,589
1,934	1,929	1,906	1,904	1,891	1,886	1,920	1,919
1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
4.471	4.509	4.619	4.624	4.145	4.133	4.582	4.587
255.9	255.4	254.7	254.5	238.7	238.1	256.0	255.8
11.88	11.84	11.81	11.80	12.00	11.96	11.83	11.84
9.063	9.063	9.033	9.023	9.744	9.706	9.064	9.062
12.55	12.54	12.50	12.50	10.98	10.96	12.54	12.54
15.96	15.95	15.97	15.94	17.83	17.78	16.01	16.01
7.197	7.194	7.176	7.173	7.816	7.802	7.207	7.204
2,341	2,341	2,352	2,352	2,752	2,746	2,356	2,356

Table 28. Poverty PPPs by Aggregation Methods, 2005
(local currency units per Malaysian ringgit)

Country	US\$ Poverty Line					
	ICP Basic Heading PPPs			Poverty Basic Heading PPPs		
	EKS	GK	WCPD	EKS	GK	WCPD
	(1)	(2)	(3)	(4)	(5)	(6)
Bangladesh	11.95	12.54	11.39	10.17	10.10	10.41
Bhutan	8.641	8.606	8.358	8.244	7.608	8.771
Cambodia	795.6	772.0	728.3	807.9	692.2	746.7
Fiji Islands	0.658	0.615	0.584	0.671	0.600	0.648
India	7.440	8.019	7.071	6.440	6.543	6.606
Indonesia	2,002	1,989	1,844	1,594	1,490	1,605
Lao People's Democratic Republic	1,874	1,928	1,806	1,906	1,942	1,972
Malaysia	1.000	1.000	1.000	1.000	1.000	1.000
Maldives	4.200	3.712	3.513	4.619	4.033	4.750
Mongolia	241.2	213.6	222.6	254.7	235.5	245.0
Nepal	12.22	12.79	11.68	11.81	11.38	12.13
Pakistan	9.679	10.30	9.336	9.033	9.069	9.535
Philippines	11.14	10.78	10.20	12.50	11.98	12.58
Sri Lanka	17.96	17.87	16.55	15.97	15.59	16.54
Thailand	7.775	7.974	7.309	7.176	7.166	7.219
Viet Nam	2,794	2,866	2,647	2,352	2,207	2,314

PPP = purchasing power parity; ICP = International Comparison Program; EKS = Eltető-Köves-Szulc; GK = Geary-Khamis; WCPD = weighted country product dummy.

The second point of interest is the significant differences in estimates of poverty incidence generated by the use of PPPs based on poverty-specific price surveys and those based on ICP price surveys. Again, consistent with the discussions so far, estimates of poverty incidence based on PPPs using poverty-specific price survey data are generally lower than those computed using PPPs based on the PAG methodology in 9 out of 15 countries. Therefore, the use of poverty-specific price survey data generally reduces the estimates of poverty incidence except for Cambodia, Fiji Islands, Lao PDR, Maldives, Mongolia, and Philippines where PPPs based on poverty-specific price surveys show a higher incidence of poverty.

In the lower panel of Table 29, the incidence of poverty in Indonesia remains constant in all scenarios, as the Indonesian poverty line is used as the reference poverty line. For all countries, the estimates of poverty incidence based on the Indonesian poverty line are lower than the estimates resulting from the use of an IPL. The difference between the top and the

bottom panels captures the effect of using different poverty lines for computing poverty incidence.

For purposes of comparing poverty incidence, estimates generated in the literature for the region and for 2005, which are reported in *Key Indicators 2007* (ADB 2007), are presented in the last two rows. The last row shows estimates of PPPs based on \$1/day IPL converted using PPPs for consumption from the Penn World Tables. These estimates appear to be consistently lower than those generated using national poverty lines. This pattern may indicate that the PPPs used are inappropriate or that the IPL is not consistent with the national poverty lines used.

Conclusion and Recommended Poverty PPPs for the 2005 ICP Asia Pacific

The contents of this chapter are the central focus of the poverty PPP study. Figure 3 summarizes the steps involved in compiling the poverty PPPs and

Table 28. Poverty PPPs by Aggregation Methods, 2005
(local currency units per Malaysian ringgit) (continued)

Indonesia Poverty Line					
ICP Basic Heading PPPs			Poverty Basic Heading PPPs		
EKS	GK	WCPD	EKS	GK	WCPD
(7)	(8)	(9)	(10)	(11)	(12)
11.85	11.94	11.08	10.19	10.09	10.53
8.494	8.197	8.178	8.204	7.444	8.765
781.4	739.1	705.8	800.5	687.6	757.9
0.647	0.595	0.567	0.667	0.598	0.643
7.497	7.850	7.026	6.479	6.558	6.819
1,987	1,928	1,806	1,588	1,482	1,576
1,891	1,897	1,796	1,920	1,965	2,134
1.000	1.000	1.000	1.000	1.000	1.000
4.145	3.635	3.464	4.582	4.022	4.884
238.7	206.7	216.2	256.0	235.0	253.1
12.00	11.98	11.12	11.83	11.27	12.07
9.744	10.16	9.236	9.064	9.043	10.419
10.98	10.35	9.91	12.54	12.03	13.21
17.83	17.30	16.15	16.01	15.61	17.82
7.816	7.822	7.249	7.207	7.218	8.147
2,752	2,717	2,550	2,356	2,221	2,306

also help identify the choices to be made at different steps. In all, a total of 144 different combinations and sets of poverty PPPs are possible; all of them have the potential to replace the consumption PPPs from the ICP used in converting the IPL.

This chapter presented PPPs compiled using the methodology recommended by the PAG and compares them with the conventionally used consumption PPPs. The conclusion is that the use of expenditure share weights of poor households can affect the estimates of PPPs significantly. The results presented here support the recommendation of the PAG and confirm that replacing the national income weights with the expenditure share weights is a necessary first step in refining and improving the relevance of PPPs used for converting the IPL.

The chapter examined the effect of the use of poverty-specific price surveys as the main source of price data in computing the basic heading PPPs, which are used as inputs in poverty PPP computation. The results suggest that poverty-specific price survey data have a major effect on poverty PPPs. A

comparison of the poverty-specific price surveys PPPs with the conventional PPPs and PAG methodology PPPs suggests that using the poverty-specific price survey data has a bigger effect on the final PPPs than using just the expenditure patterns of the poor. The results suggest that collection of price data through poverty-specific product lists and price surveys can improve the estimates of PPPs for converting IPLs.

The chapter also examined the robustness of PPPs to variations in using democratic versus plutocratic weights, different aggregation methods, and identifying households around the poverty line. There is virtually no difference in the results from the use of democratic and plutocratic weights. In contrast, the use of the aggregation method has the potential to generate differences in estimated poverty PPPs. Finally, using the expenditure weights of households below the poverty line rather than those of households around the poverty line has a negligible effect compared with the effect generated by the use of poverty-specific price survey data and poverty-specific expenditure patterns of the poor.

Table 29. Estimates of Poverty Incidence for 16 Countries

Line	Price	RefPopn	Weight	Bangladesh	Bhutan	Cambodia	Fiji Islands	India	Indonesia
\$1/day poverty line	Poverty survey prices adjusted to June 2005	Below the poverty line	Plutocratic	54.46	36.10	59.33	31.84	49.97	22.59
			Democratic	54.48	36.10	59.16	31.43	50.21	22.29
		Band of $\pm h$	Plutocratic	54.67	36.59	61.04	32.84	49.92	23.48
			Democratic	54.70	36.59	61.10	32.80	50.20	23.41
		Band of $\pm 0.5h$	Plutocratic	54.77	36.68	61.34	32.98	50.06	23.75
			Democratic	54.88	36.68	61.42	32.90	50.51	23.60
	ICP (PAG)	Below the poverty line	Plutocratic	66.34	38.05	58.88	31.57	58.73	40.93
			Democratic	66.41	37.95	58.78	31.49	59.94	40.91
		Band of $\pm h$	Plutocratic	66.90	38.73	60.04	32.05	58.18	41.33
			Democratic	66.95	38.73	60.09	31.98	59.16	41.39
		Band of $\pm 0.5h$	Plutocratic	67.21	39.08	60.28	31.97	58.24	41.57
			Democratic	67.22	39.08	60.32	31.97	59.38	41.59
Indonesia national poverty line	Poverty survey	Band of $\pm h$ around the poverty line	Plutocratic	43.36	29.99	51.74	27.48	41.98	14.74
			Democratic	43.51	30.16	51.86	27.49	42.46	14.74
	ICP (PAG)		Plutocratic	36.71	19.23	33.63	18.34	36.28	14.74
			Democratic	36.85	19.23	33.78	18.34	37.61	14.74
Poverty incidence from <i>Key Indicators 2007</i>									
National poverty lines				40.00	31.70	34.70	25.50	27.50	16.70
\$1/day poverty line				36.26	0.00	18.47	25.50	35.07	7.65

h = bandwidth; ICP = International Comparison Program; RefPopn = reference population; PAG = Poverty Advisory Group.

It is therefore recommended that the following four sets of PPPs (Table 30) be used for converting the IPL into common currency units. All the PPPs are expressed using the Malaysian ringgit as the reference currency.

The key to using the PPPs in Table 30 is as follows. The PAG methodology uses basic heading PPPs based on the 2005 ICP Asia Pacific price surveys and expenditure patterns of the poor. The PPPs based on poverty-specific price survey data also make use of expenditure weights of the poor. All the expenditure shares are computed as democratic weights and for all households with expenditures within h of the poverty line. The EKS aggregation method is used in all computations. The \$1/day refers to the IPL \$1.08/

day in 1993 dollars updated using the US CPI. The Indonesian poverty line is the national poverty line for 2005. The \$1/day and the Indonesian poverty lines are used in the compilation of expenditure share weights of households around the poverty line.

For the 2005 ICP, the PAG recommended that PPPs in column (3) be used. The difference between columns (3) and (4) is very small. If the price data from the poverty-specific price surveys are used, the resulting PPPs would be those presented in columns (5) and (6). The use of the new PPPs will have the effect of reducing poverty incidence in a number of the participating countries. The significant effect of the poverty-specific price survey data on PPPs is an important area for further research.

Table 29. Estimates of Poverty Incidence for 16 Countries (continued)

Lao People's Democratic Republic	Malaysia	Maldives	Mongolia	Nepal	Pakistan	Philippines	Sri Lanka	Thailand	Viet Nam
70.02	2.42	15.28	31.06	61.17	41.60	34.62	13.78	2.07	22.44
70.26	2.42	14.96	31.28	61.46	41.60	34.68	13.80	2.08	22.44
69.22	2.42	16.25	30.93	61.00	41.12	34.44	13.78	2.04	22.75
69.29	2.42	16.25	30.95	61.00	41.26	34.46	13.84	2.04	22.73
69.52	2.42	16.80	30.97	61.09	41.36	34.60	13.97	2.04	22.86
69.56	2.42	16.69	31.05	61.28	41.41	34.60	13.99	2.05	22.90
68.83	2.42	11.54	27.52	62.56	48.54	28.28	19.46	2.98	32.69
69.01	2.42	11.54	27.58	62.59	48.86	28.30	19.53	2.98	32.67
68.23	2.42	12.15	27.80	63.32	47.92	28.81	19.85	2.98	33.58
68.26	2.42	12.15	27.84	63.36	47.94	28.82	19.88	2.98	33.63
68.41	2.42	12.39	27.97	63.44	48.07	29.00	20.23	3.03	33.84
68.50	2.42	12.39	28.02	63.48	48.09	29.04	20.32	3.04	33.84
60.75	1.33	10.48	24.39	53.29	30.71	28.31	8.71	1.07	15.37
60.83	1.33	10.18	24.52	53.35	30.81	28.37	8.73	1.08	15.43
41.88	0.46	3.92	12.60	38.34	18.55	13.08	5.21	0.55	12.28
41.99	0.46	3.92	12.66	38.42	18.66	13.10	5.26	0.55	12.34
32.70	5.10	21.00	36.10	30.90	23.90	30.00	22.70	9.80	19.50
28.84	0.00	1.00	11.03	24.74	9.75	13.18	4.83	0.00	8.38

Table 30. Poverty PPPs Using Democratic Weights: PAG Methodology versus Poverty-Specific Price Data, 2005 (local currency units per Malaysian ringgit)

Country	Currency	PAG Methodology		Based on Poverty-Specific Price Surveys	
		\$1/day	PL of Indonesia	\$1/day	PL of Indonesia
(1)	(2)	(3)	(4)	(5)	(6)
Bangladesh	Taka	11.95	11.85	10.17	10.19
Bhutan	Ngultrum	8.641	8.494	8.244	8.204
Cambodia	Riel	795.6	781.4	807.9	800.5
Fiji Islands	Fiji Dollar	0.658	0.647	0.671	0.667
India	Indian Rupee	7.440	7.497	6.440	6.479
Indonesia	Rupiah	2,002	1,987	1,594	1,588
Lao People's Democratic Republic	Kip	1,874	1,891	1,906	1,920
Malaysia	Ringgit	1.000	1.000	1.000	1.000
Maldives	Rufiyaa	4.200	4.145	4.619	4.582
Mongolia	Tugrik	241.2	238.7	254.7	256.0
Nepal	Nepalese Rupee	12.22	12.00	11.81	11.83
Pakistan	Pakistani Rupee	9.679	9.744	9.033	9.064
Philippines	Philippine Peso	11.14	10.98	12.50	12.54
Sri Lanka	Sri Lankan Rupee	17.96	17.83	15.97	16.01
Thailand	Baht	7.775	7.816	7.176	7.207
Viet Nam	Dong	2,794	2,752	2,352	2,356

PAG = Poverty Advisory Group; PL = poverty line.