

The Politics of Poverty Measurement and Social Policies: Global Observations

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2.1 INTRODUCTION

Countries of all shapes, sizes, and characteristics have been experimenting with various forms of social policy to reduce poverty. However, these experiments have not allowed governments to proclaim poverty-free zones and a universally agreed upon and proven strategy has not emerged to magically reduce poverty. Part of the reason for this difficulty in devising proven strategies is political since such strategies would invoke major resource reallocations that require broad political support. In the increasingly globalized world of competitive markets, individual factors such as poor choice, lack of hard work, and bad behavior are commonly blamed for widespread poverty. But despite all the talk and rhetoric about poverty eradication, enormous resistance exists to making genuine policy efforts to reverse the belief that eradicating poverty is impossible because it imposes an undue burden on the non-poor.

This is not to downplay the role of social policies in reducing poverty; Countries with comprehensive social policy interventions have witnessed consistently lower poverty rates as shown by many high-income as well as developing countries (ADB 2006; Barrientos 2011; Brady 2009; Kenworthy 2011; Korpi and Palme 1998; Wagle 2013, 2014a).

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The politics of poverty reduction revolve around whether or not the government can commit resources to implement social policy programs to help those in or at risk of poverty. But while social policy initiatives necessarily start with the identification of the poor and the vulnerable, poverty measurement itself is not cast in a political light. With the notion that poverty analysis is a technical exercise (World Bank 2005), defining and assessing poverty are never associated with the political choices governments often make when determining the magnitude and nature of poverty and when rethinking policies needed to address poverty.

This chapter asks this hard question revolving around the politics of poverty measurement: How do politics impact the way poverty is defined and assessed? Rather than getting into the basis on which poverty is measured, something equally political in its own light, the emphasis is on how the monetary measures of poverty (i.e., income or consumption) are used to identify people's poverty status. Since poverty signifies an inability to maintain a customary living standard, how and where poverty lines are set have important political implications. To the extent that poverty measurement practices and especially official poverty lines deviate, in practice, from changes in living standards, poverty is assumed to suffer from politics.

This chapter seeks to understand the extent to which governments heed living standards and their changes in the practice of measuring poverty. While the historical contexts and underlying sociocultural values play roles in determining how the poor are identified and supported, political systems concerned about the "common good" would be more likely to properly align their poverty lines with changes in people's living standards. This analysis makes proper accounting of the variations in poverty lines due to economic, political, and cultural differences for a cross section of 75 low- and middle-income countries. The insights from this cross-national analysis are enriched by an extended analysis of five South Asian countries in a longitudinal framework. While the aggregate data used here are not as specific and complete as we wish them to be, the findings help us to understand how political choices may have affected the way poverty is measured in developing countries.

This chapter is organized into six sections. The next section surveys the literature on poverty measurement and attempts to link it with politics and political choices. Our hypotheses and empirical strategy are discussed in Sect. 2.3. Section 2.4 examines the politics of poverty measurement using data circa 1990s with a particular focus on how official

poverty lines have responded to variations in consumption expenditures and GDP per capita. This cross-national analysis is extended in Sect. 2.5 to assessing how poverty measurement practices and outcomes may have varied between 1990 and 2014 in South Asia. The final section concludes with relevant theoretical and policy observations.

2.2 POLITICS OF POVERTY MEASUREMENT

Most of the literature, including news media coverage, presents poverty measurement purely as a technical issue without a trace of politics. Whether it is in the monetary terms that have historically been applied to measure poverty or in capability or multidimensional terms that are used to frame the broader social policy debates, politics are not directly referenced when addressing what is to be measured and how. What is clear from the public policy standpoint, however, is the choice to be made with regard to what it is that accurately captures the living conditions of the poor and how that needs to be assessed when invoking both the content and process of poverty measurement.

Leaving aside the capability, deprivational, or multidimensional concepts of poverty—which is primarily due to an exclusive focus on income or consumption—the process and yardstick used to identify the poor following monetary poverty lines are arguably political (Glennester 2002; Sen 1999; Wagle 2008a, b). A part of this politicization emanates from the application of absolute versus relative concepts of poverty, with the former treating needs as static and independent of those of others in society and the latter connecting one’s needs necessarily with those of others. Over time, whereas absolute poverty lines remain unchanged (except for changes in the consumer price index), relative poverty lines necessarily change when the overall living conditions change. As scholars debate the virtues of these concepts (Sen 1985; Townsend 1985), even the most ardent proponent of the absolute concept agrees, drawing from Adam Smith, that the relative concept is centered on “the space of commodities, resources, or incomes in dealing with some important capabilities such as avoiding shame from failure to meet social conventions, participating in social activities, and retaining self-respect” (Sen 1983: 168). When the absolute concept is applied to the capability or multidimensional space of poverty, the contextual differences in the commodity space, whether over time or across societies, suggest that one’s poverty essentially depends on the overall living conditions of the given

society (Wagle 2008b, 2014b). For example, applying the World Bank's original brain-child of a one-dollar-a-day poverty line of income would be ludicrous when attempting to measure poverty in middle- or high-income countries or in countries that achieve rapid growth in income. It is because of the changing living standards worldwide that this one-dollar-a-day poverty line, developed originally from the practices of some 15 poorest countries, has been updated by 2015 to \$1.90 (in 2011 purchasing power parity, or PPP, values).

Using the cost of basic needs has been the most dominant approach to developing poverty lines. The typical process of poverty measurement under this approach involves developing food poverty lines from the expenditures attached to an "economy food plan" that yields the required nutritional intake using given price levels and adding non-food allowances based on the expenditure patterns of families that are right around the food poverty lines (Ravallion 1998; World Bank 2005). The first part of this process applies the absolute approach and is seemingly technical, whereas the latter draws from empirical observations and thus can be more non-objective. Where policy choice enters, however, is in developing the economy food plan that ensures the requisite nutritional intake in one of the several ways. Including meat, fish, poultry, or other higher-quality products, for example, can elevate the expenditures needed to develop the food poverty line. It is also a standard practice that food poverty lines are revised above and beyond incorporating changes in consumer price indices so that the resulting estimates properly align with customary food consumption patterns. Whether in establishing or in revising food poverty lines, the empirical distribution of food expenditures is typically used as a guide. All of this also requires major considerations of the relative approach where what is considered an absolute minimum necessarily relates to the overall food consumption patterns in the community.

Nowhere is the application of relative poverty more salient and direct than in deriving the non-food allowances typically measured in values relative to the food poverty line. Since wide variations exist in non-food expenditures not only across individuals or families but over time as well, especially given the changing lifestyles operating at the global scale, referring back to the empirical distribution is only sensible. In the process, how high are the allowed non-food expenses and what reference point is used for computation have an enormous impact on the overall poverty line. Some societies have greater non-food expenditures

than others with urban areas and those exposed to modern amenities observing greater non-food needs. Temporal changes are also significant since needs evolve over time. In the USA, for example, the official poverty lines in the 1960s were set approximately at one-half the median income, which by the 1990s were reduced to one-third the median income. With growing housing, transportation, insurance, and child-care costs, all of which have become almost essential in the modern era, diverging arguments exist about the exact poverty threshold to accurately reflect some customary lifestyle minima (Citro and Michael 1995; Dalaker 2005).

Ravallion et al. (2009: 167) from the World Bank summarize this somewhat arbitrary process of the development of a poverty line this way:

There is considerable scope for discretion in setting such a poverty line. Although the stipulated food-energy requirements are similar, the food bundles that can yield a given food energy intake can vary enormously, and some will be preferable to others in any given context. The non-food spending that is deemed adequate will also vary. The judgments made in setting the various parameters of a poverty line are likely to reflect prevailing notions of what poverty means in each country setting.

The idea that the process of developing poverty lines and therefore measuring poverty is free of politics and policy choices is far from accurate. When policy choices are involved, there is an incentive for governments and other institutions involved in the process to examine the sensitivity of outcomes associated with setting poverty lines at different levels and eventually adopting choices that ensure more favorable outcomes. Given the highly skewed distribution of consumption and especially incomes in a typical society, a slight manipulation of the given poverty line can lead to widely different poverty measurement outcomes. In the USA, where the attempt to officially adopt the long-experimented poverty lines to be used with all cash and near-cash incomes has been trumped by politics (Citro and Michael 1995; Glennerster 2002), a change in the definition of income, while leaving the overall economic welfare unchanged, is shown to increase the number of poor in 2014 by close to 1.4 million (Short 2015). Internationally, although the choices made by governments under the auspices of the World Bank may not be reexamined in favor of sensitivity, small changes in poverty lines or measurement practices can lead to significant revisions in poverty outcomes. This issue of adjusting

poverty lines becomes more important when examining the efficacy of certain policy initiatives. Because the low-income sections of the population, which are directly impacted, are not fully represented in the process of developing poverty lines and measuring poverty (Hickey and Bracking 2005; Wagle 2008b), ramifications for the more well-off population groups become political while adopting specific policy changes.

The point is not that the relative concepts of poverty defined as 40%, 50%, or 60% of the median levels of income or consumption will be free from such potential policy choice manipulation (Atkinson and Bourginognon 2001; Kenworthy 2011; Wagle 2013). Moving from one criterion to another can lead to very different measurement outcomes, just like in the case of processes that are arguably absolute. But the likelihood of such manipulation would diminish, especially when the criteria attached to the given empirical distribution remain consistent. Even more importantly, the relative process allows automatic adjustments to poverty lines depending on changes in overall living conditions, something that is typically ignored in the process employing the absolute approach.

2.3 HYPOTHESES AND EMPIRICAL STRATEGY

To what extent has the poverty measurement practice become political? In other words, how do politics impact the way poverty is defined and measured? Given that the magnitude and degree of poverty depend on the measurement process applied, social policies aimed at reducing poverty can suffer from this political choice as well. The point is to examine how the official poverty lines developed and used by governments compare with the applicable living standards measured as private consumption expenditures per capita and GDP per capita. While the size of official poverty lines relative to consumption and GDP per capita levels depends on a number of regional and unique social, political, and economic contexts, the hypothesis of the politics of poverty measurement suggests that countries with higher living standards would not observe significantly higher relative sizes of official poverty lines. An insignificant relationship between the relative size of official poverty lines and living standards would help reject the hypothesis of the non-existence of politics involved, something that can happen if governments are able to resist politics and align with economic welfare of the low-income sections of the population. But any significant negative relationship would serve as evidence that the politics

disallow governments to adopt poverty lines that are consistent with changes in living standards. When examining living standards, one must recognize the difference between consumption per capita and GDP per capita, with the former more specifically tied with the official poverty lines which are typically based on income or consumption expenditures. For this reason, the hypothesized negative relationship would be more significant in the case of consumption than in the case of GDP per capita.

The first part of this analysis tests these hypotheses globally in the cross-national framework. The intent in this part of the analysis is to assess how wide variations in the cross-national context of economic policies and performance affect the hypothesis of the politics of poverty measurement. The data on official poverty lines and private per capita consumption expenditures needed for this part of the analysis are drawn from Ravallion et al. (2009), who compiled them from household surveys across 75 low- and middle-income countries from 1988 to 2005 (non-repetitive) and computed their 2005 PPP equivalent values. The data on GDP per capita and other appropriate indicators are drawn from the World Bank (2016).

The second part of this analysis focuses on an extended period from 1990 to 2014 in South Asia by drawing data from the World Bank (2016) as well. The intent here is to tease out how the politics of poverty measurement apply in the temporal framework of five South Asian countries that have relatively comparable economic, political, and cultural contexts. Rather than focusing on the politics of setting poverty lines, however, this part of the analysis examines how the politics identified above have impacted the actual poverty measurement outcomes. The variable of interest in this case is the poverty headcount ratio with the relative size of official poverty lines used as an independent variable. The specific hypothesis tested involves whether countries or years with greater politics (i.e., lower poverty lines relative to per capita levels of consumption or GDP) lead to significantly lower poverty headcount ratios with other relevant factors held constant. Any evidence of a negative association between the relative size of poverty lines and the poverty headcount ratios would confirm the hypothesis of the politics of poverty measurement in terms of the final outcomes as well. But while the cross-national analysis described above also controls for appropriate contextual variations to the extent allowed by data, the relatively small sample size, when faced with the need to control for their widely varying contexts, can lead to potential inconsistencies and inefficient outcomes. Given

similarities in the economic, political, and cultural contexts across South Asia, the evidence from this part of the analysis helps to sort out how the politics of poverty measurement may have impacted the final poverty measurement outcomes.

Both parts of this analysis begin with some descriptive data and bivariate graphical profiles of the poverty lines and consumption and GDP per capita. Regression analyses are conducted in both cases to identify potential sources of variation in the practice and outcomes of poverty measurement. While smaller sizes of the official poverty lines relative to per capita levels of consumption and GDP are assumed to suffer from politics, in which the measurement system falls short of the changes in these key economic indicators, the deviations as well as their impact on poverty measurement outcomes depend on a number of country- and year-specific characteristics. In the case of cross-national analysis with widely varying contexts, factors such as regional, political, economic, and population characteristics can significantly affect the way such practices play out. With other factors held constant, for example, countries circumscribed by regional contexts or culture may share similar practices, whereas countries with more democratic systems may help lower the politics in poverty measurement. A larger population may make the system more complex and thus more prone to the politics of poverty measurement. Other factors such as the share of the population that lives in rural areas, the GDP growth rate, income levels, foreign trade, and government expenditures can have significant impacts as well. While these poverty measurement outcomes directly control for the rural–urban composition of population by applying more elaborate poverty lines, it is still important to note that the relative size of the rural population can significantly affect the poverty measurement practices, with greater rural populations likely to encounter urban bias of policymakers helping to heighten the difference of poverty lines with per capita levels of consumption and GDP. Government expenditure is even more important since it effectively measures the strength of the political system that culminates in governance and perhaps the ability to implement social policies that promote public welfare.

The multivariate analysis of the poverty measurement outcomes in South Asia is a more limited exercise focused on ascertaining the impact of politics. Rather than including an array of regional, economic, political, and cultural factors, which do not vary as widely, this part of the analysis includes controls for the size of the rural population, income

share of the bottom 40%, and consumption or GDP per capita. The size of the rural population can be a major factor helping to elevate poverty outcomes, whereas income share of the bottom two quintiles helps improve poverty outcomes with other things remaining constant. It is important to note, however, that the regression analysis is performed in the fixed-effects framework which helps to improve efficiency (and consistency) even though many other factors become inapplicable or not so important.

2.4 POVERTY LINES IN PRACTICE GLOBALLY

How do poverty lines compare with the levels of per capita consumption expenditures and GDP across countries? Figure 2.1 depicts the profiles of official poverty lines with the annual private consumption and GDP per capita, which are all measured in 2005 PPP dollars. The coverage includes one entry from each of 75 low- and middle-income countries circa 1990s, even though the actual year for which data are available ranges from 1988 to 2005 (see the appendix for the list of countries and their data coverage). It is no surprise that the poverty lines increase with consumption and GDP per capita because countries with higher living standards generally set higher poverty lines as well. As expected, poverty lines are related more closely to annual consumption per capita than to GDP per capita as indicated by the overlaid regression lines. This occurs primarily because the former measures private consumption exclusively,

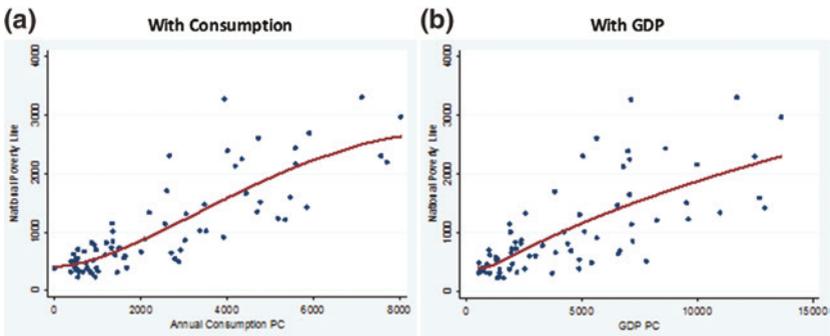


Fig. 2.1 National poverty line with consumption and GDP per capita (PPP 2005\$)

whereas the latter includes non-individual (i.e., public and institutional) incomes that do not directly affect individuals' economic welfare.

Figure 2.2 allows a closer look at this connection by interfacing the relative sizes of official poverty lines with consumption and GDP per capita. Consumption and GDP enter twice in these profiles: once when computing the relative size of poverty lines and again in terms of the horizontal axis. Understandably, most of the poverty lines are smaller than or, in fact, right around 50% of the private consumption on a per capita basis. Although per capita consumption capturing the average is different from average income, this is somewhat consistent with the notion of the relative poverty line being set at 50% of the median income in high-income countries. While poverty lines are higher than the level of per capita consumption expenditures in exceptional cases (e.g., Ethiopia, Gambia, Guinea-Bissau, Mali, Sierra Leone, and Tajikistan) and run much lower than 50% in some cases, there is a negative and perhaps non-linear relationship between the relative size of poverty lines and consumption. Whereas poverty lines were larger in countries with greater consumption expenditures, as observed in Fig. 2.1, the relative size of poverty lines hovers around 40–50% for countries with consumption expenditures greater than \$2000 in 2005 PPP values.

The second part of Fig. 2.2 presents the relationship between the relative size of poverty lines and GDP per capita. The relative size of poverty lines is effectively lower in the case of GDP per capita than in the case of consumption, something that is consistent with the fact that only

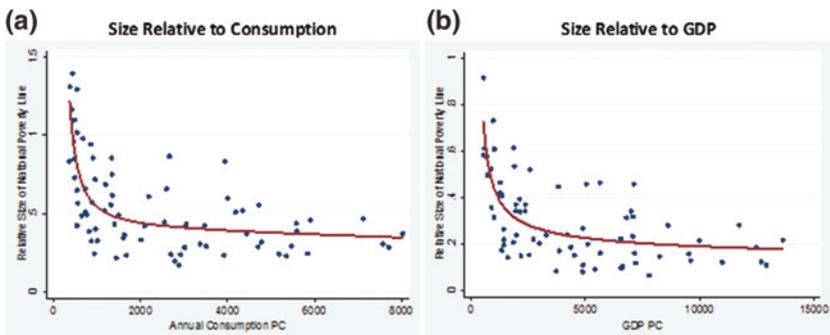


Fig. 2.2 Relative sizes of national poverty lines with consumption and GDP per capita (PPP 2005\$)

a fraction of GDP goes into consumption and, therefore, poverty lines are typically set much smaller than GDP per capita. But, as in the case of consumption, the relative size of poverty lines remains consistently around 20% of per capita GDP for countries with GDP's greater than \$5000 in 2005 PPP values. The message from the relative size of poverty lines is that while low-income countries set poverty lines at higher levels relative to per capita private consumption expenditures and GDP per capita, higher-income countries do not necessarily set their poverty lines at lower levels. There are also variations across the countries grouped by levels of consumption and GDP per capita. It is only through a closer look at the potential source of these discrepancies that we can gain important insights into how politics may play a role in suppressing poverty lines at significantly lower levels relative to consumption expenditures and GDP per capita.

Some of these potential sources are explored in Table 2.1 depicting the relative size of poverty lines by continent and geographic region. Whereas poverty lines represented 54% of private consumption in the entire group of 75 countries on average, Africa is the only region where the relative size of poverty lines remained greater than this average, with Europe in particular exhibiting poverty lines that are less than 40% of private consumption. Countries in Asia and the Americas had comparable sizes of poverty lines at 45% when measured relative to consumption expenditures. A similar pattern emerges from the regional breakdown, with Sub-Saharan Africa setting poverty lines at 75% of private per capita consumption and East Asia and the Pacific, South Asia, and Middle East and North Africa setting poverty lines at or below 40% of their consumption.

This observation is quite consistent with that of the relative size of poverty lines by GDP per capita, which is also reported in Table 2.1. Whereas poverty lines measure close to 30% of GDP per capita on average, countries in Africa and especially Sub-Saharan Africa tend to set poverty lines that are considerably larger relative to GDP per capita than those of other countries in East Asia and the Pacific and in the Middle East and North Africa. There are some differences with poverty lines in South Asian countries taking up a relatively greater share of per capita GDP and countries in Asia, rather than in Europe, setting the lowest relative size of poverty lines in the case of GDP per capita. The relative size of poverty lines is also much lower in the case of GDP per capita than in the case of consumption. But the relatively large standard deviations

Table 2.1 Poverty lines relative to consumption and GDP per capita (PPP 2005\$)

<i>Categories</i>	<i>Relative to consumption</i>		<i>Relative to GDP</i>	
	<i>Mean</i>	<i>Std. Dev.</i>	<i>Mean</i>	<i>Std. Dev.</i>
All countries	0.541	0.290	0.297	0.178
By continent				
Africa	0.705	0.325	0.384	0.198
Americas	0.447	0.195	0.270	0.123
Asia	0.454	0.251	0.227	0.169
Europe	0.381	0.108	0.237	0.100
By region				
East Asia and the Pacific	0.388	0.192	0.121	0.052
South Asia	0.402	0.138	0.190	0.060
Europe and Central Asia	0.447	0.229	0.286	0.154
Middle east and North Africa	0.376	0.275	0.143	0.062
Sub-Saharan Africa	0.753	0.305	0.423	0.185
Latin America and Caribbean	0.447	0.195	0.270	0.123

suggest that the grouping of countries by continent or region does not fully encapsulate the individual country experiences, something that can be explored more fully in a multivariate framework.

Table 2.2 reports results from the estimation of models in which the relative size of poverty lines is regressed on the per capita levels of consumption and GDP separately and, as applicable, with other appropriate control variables. Also reported are the robust standard errors which are used to address some methodological concerns of heterogeneity. The variance inflation factors are below six in both cases (not reported), thus suggesting that multicollinearity, if any, may not be highly pronounced. But with Africa and East Asia and the Pacific used as reference categories, the Americas, Europe and Central Asia, Sub-Saharan Africa, and Latin America and Caribbean register significant and positive coefficients, suggesting that with other factors held constant, these continents and regions set higher poverty lines on average. It is interesting that while the regional differences with East Asia and the Pacific are justified given their tendency to have lower relative sizes of poverty lines, the finding that the Americas set higher relative sizes of poverty lines when compared with Africa is interesting given the otherwise higher relative sizes of poverty lines in case of the latter.

Table 2.2 Regressions of poverty lines relative to consumption and GDP per capita (with robust standard errors)

Variables	Poverty line relative to consumption			Poverty line relative to GDP		
	By continent		By region	By continent		By region
	Coef.	Std. Err.	Coef.	Std. Err.	Coef.	Std. Err.
Continent (reference: Africa)						
Asia	-0.05	0.081				
Americas	0.351**	0.142			-0.005	0.046
Europe	0.103	0.133			0.199***	0.072
Region (reference: East Asia and Pacific)					0.088	0.065
South Asia			0.066	0.082		0.008
Europe and Central Asia			0.253***	0.093		0.176***
Middle East and North Africa			0.067	0.119		0.027
Sub-Saharan Africa			0.206**	0.095		0.112*
Latin America and Caribbean			0.507	0.123		0.290***
Democracy score (10 high; 0 low)	<0.001	0.009	0.002	0.008	0.005	0.005
Foreign trade (% GDP)	0.002*	0.001	0.003**	0.001	0.001	0.001
Population (log)	-0.042***	0.015	-0.018	0.018	-0.021*	0.011
Rural population (%)	-0.003	0.007	-0.005	0.006	0.001	0.006
GDP growth rate	0.002	0.002	0.002	0.002	0.001	0.001
Income level (reference: low income)						
Middle income	0.017	0.078	0.046	0.077		
High income	0.201	0.136	0.215	0.131		
Government expenditure (% GDP)	0.012***	0.004	0.011***	0.004	0.012***	0.004
Consumption or GDP PC (PPP 2005\$, log)	-0.292***	0.077	-0.298***	0.074	-0.169***	0.037
Constant	2.956	0.676	2.382***	0.637	1.668***	0.356
N	71		71		67	
Adjusted R-squared	0.631		0.664		0.655	
					1.094***	0.401
					67	
					0.718	

Note * $p \leq 0.10$; ** $p \leq 0.05$; and *** $p \leq 0.01$

Government expenditure turns out to be the only political and economic variable that is consistently linked with the relative size of poverty lines by both consumption and GDP per capita. The positive coefficients indicate that countries with higher government expenditures relative to GDP are expected to exhibit larger relative sizes of poverty lines with other factors held constant. This finding is not in and of itself surprising since countries with larger governments typically spend greater resources on public welfare (Brady 2009; Kenworthy and Pontusson 2005; Wagle 2009), of which defining and setting poverty lines are a major part. But this is quite important because stronger governments that command greater resources also seem to advocate for the interest and welfare of low-income populations that are likely to benefit from relatively higher poverty lines. There is also some evidence that the size of population and foreign trade may affect the relative size of poverty lines with their effects running in opposite directions. A larger population hints at a more complex political-economic system and may help limit the size of poverty lines, especially relative to consumption per capita, whereas foreign trade indicating economic connections with other countries may help elevate it. Contrary to the idea that democratic governments tend to be more responsive to political demands helping to protect the interests of the masses including the lower-income populations (Dahl 1998; Kenworthy and Pontusson 2005; Przeworski 2005), the finding that the degree and perhaps quality of democracy do not covary with the relative size of poverty lines is interesting. But the complete insignificance of the role of democracy in setting poverty lines reaffirms the difficulty in establishing a direct link between democratic institutions and the policy performance in reducing poverty and improving public welfare across both high- and low-income countries (Wagle 2009, 2012).

Results are also consistent with the roles of the size of consumption or GDP per capita in determining the relative size of poverty lines. With other factors held constant, per capita levels of consumption and GDP both help elevate poverty lines significantly, with one additional percent of consumption per capita increasing the relative size of poverty lines by almost 30% and one additional percent of GDP per capita increasing the relative size of poverty lines by about 15%. In one way, this captures the impact of the overall living conditions since countries with greater levels of per capita consumption and GDP tend to embrace higher living conditions. The logarithmic relationship is also consistent with the one observed from Fig. 2.2 earlier. But this finding goes beyond the simple

idea that countries with higher average income and consumption levels set higher poverty lines as the dependent variables capture the relative conformity of poverty lines with overall consumption or GDP per capita. Just because a country has a per capita income that is higher than the average does not mean, for example, that the government will set the poverty line that is close to consumption or GDP per capita since many factors affect the distribution of consumption. For example, income and population can play significant roles as well. What this finding highlights, however, is the political strength of the lower income populations and/or the willingness of the respective governments to side with the general welfare of those who may otherwise have less representation or clout in the policymaking process (Korpi and Palme 1998; Wagle 2006).

2.5 POVERTY MEASUREMENT AND OUTCOMES IN SOUTH ASIA

The above cross-national observations are also tested in a longitudinal framework by focusing on five South Asian countries—Bangladesh, India, Nepal, Pakistan, and Sri Lanka. No doubt, important differences remain among them given their diverging paths along economic policies and performance, democratic politics, and religious practices and value systems. But the major benefit of this exercise is the ability to rule out the roles of contextual variations since these five countries have more commonalities than differences in economic conditions, political functioning, and cultural practices, especially when compared to other continents and regions. This exercise also allows greater insights from temporal changes helping to understand how poverty lines are linked with changing living standards. Because data on poverty measurement outcomes and especially on poverty headcount ratios are available along with the data on poverty lines, this exercise can be extended to link poverty measurement practices with their outcomes.

Table 2.3 summarizes data on the size of official poverty lines relative to both consumption and GDP per capita. Poverty lines were set at 29% of private consumption per capita expenditures and at 34% of the GDP per capita on average when all countries and years are aggregated. It is important to note that the data coverage is quite imbalanced across countries. Because poverty lines are used at the national level, something different from their computation at the rural/urban or some regional levels as is typically presented, data were not readily available for some

countries. The practice of revising poverty lines beyond changes in consumer price indices also complicates data availability. Moreover, some countries have limited data on private consumption expenditures, which typically come from household surveys and are needed to compute the relative size of poverty lines. As a result, India and Nepal have very limited data notably on poverty lines relative to consumption.

There is considerable variation in the relative size of poverty lines across countries. The highest average size relative to consumption expenditures per capita, for example, is 31% in Bangladesh and the lowest is Sri Lanka at 18%. The average size relative to GDP per capita, on the other hand, is highest in Nepal at 41% and lowest in Sri Lanka at 21%. While the relative sizes are very close between Bangladesh and Nepal, their rankings on the relative size of poverty lines switch between consumption per capita and GDP per capita. The case of Sri Lanka is particularly interesting: Sri Lanka's poverty line is set at 21% of per capita consumption expenditures, and its GDP per capita is much lower than those of other countries. Also, whereas the average size relative to GDP per capita is at least 5 percentage points higher than that relative to consumption, the two are essentially the same in India and Sri Lanka. This observation may speak for the relatively smaller role of non-private consumption or income as a share of GDP per capita in these two countries.

These relative sizes of poverty lines do not remain unchanged over time as indicated in the minimum and maximum columns included in Table 2.3. While these variations are quite significant, even more

Table 2.3 Poverty lines relative to consumption and GDP per capita (PPP 2005\$) in South Asia, 1990–2014

<i>Variable</i>	<i>Relative to consumption</i>					<i>Relative to GDP</i>				
	<i>N</i>	<i>Mean</i>	<i>Std. Dev.</i>	<i>Min.</i>	<i>Max.</i>	<i>N</i>	<i>Mean</i>	<i>Std. Dev.</i>	<i>Min.</i>	<i>Max.</i>
All countries ^a	44	0.283	0.073	0.153	0.488	44	0.388	0.11	0.141	0.531
Bangladesh	25	0.306	0.051	0.213	0.361	25	0.386	0.095	0.23	0.531
India	4	0.268	0.101	0.197	0.416	4	0.266	0.117	0.189	0.439
Nepal	3	0.353	0.117	0.278	0.488	3	0.409	0.083	0.359	0.505
Pakistan	6	0.231	0.028	0.208	0.273	6	0.282	0.036	0.248	0.344
Sri Lanka	6	0.216	0.081	0.153	0.355	6	0.208	0.08	0.141	0.342

Note ^aThese averages do not approximate the averages for South Asia from Table 2.1. In addition to changing relative sizes of poverty lines over time, Bangladesh's values may have dominated the regional average

useful than these numbers would be the profiles presented in Fig. 2.3 that detail changes over time for each country. These profiles demonstrate that the relative size of poverty lines changes quite significantly for almost all of these countries, with the greatest changes observed in Bangladesh and India in reference to consumption per capita and in Sri Lanka in reference to consumption as well as GDP per capita levels. The size of poverty lines has actually declined over time in almost all countries, which is quite interesting given that the annual per capita consumption and GDP per capita typically grow over time. The only exception is Nepal, where the size of poverty lines slightly increased in reference to consumption between 2004 and 2011, the only 2 years with data. Pakistan is an interesting case, where the relative size of poverty lines dipped quite a bit before becoming almost comparable to the initial size.

It is important to remember that the relative size of poverty lines is a moving target that can change for a number of reasons including changing poverty lines themselves, changing reference measures (consumption or GDP per capita), and a combination of the two. This issue cannot be fully examined by focusing on summary statistics alone. What is needed is some form of multivariate analysis to discern the impact of specific factors after controlling for other relevant factors. Given the frequently changing profiles of the relative sizes of poverty lines of these countries, however, the form of analysis conducted in the previous section would not be very useful. The fact that the data discussed here are highly imbalanced further undermines the utility of these analyses.

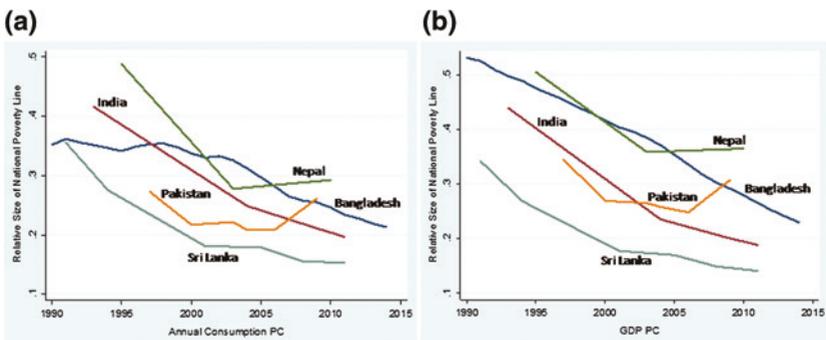


Fig. 2.3 Relative sizes of national poverty lines with consumption and GDP per capita (PPP 2005\$) in South Asia, 1990–2014

What is methodologically justified and substantively more useful is to analyze how the relative size of poverty lines help to determine poverty measurement outcomes. Focusing on this aspect of the analysis, Table 2.4 reports results from fixed-effects regressions of poverty headcount ratios with consumption or GDP per capita (whichever is applicable), the income share of the bottom 40%, and the size of rural population as regressors. The goal here is to examine how poverty measurement practices, with regard to setting poverty lines consistent with changes in the levels of per capita consumption or GDP, help explain variations in poverty measurement outcomes. While these five countries have some differences in the economic, political, and cultural realities and practices, these are not included in this exercise given limited country observations. The use of fixed-effects regression is also expected to produce consistent results helping to mitigate some omitted variables bias. But the additional regressors are needed to tease out the potential sources of variation in poverty measurement outcomes.

Unlike with the models of poverty lines, the results presented here underscore the relevance of the size of rural population in determining poverty measurement outcomes. The positive and significant coefficient is consistent given that poverty is typically more concentrated in rural

Table 2.4 Fixed effects regressions of poverty headcount ratios in South Asia, 1990–2014

<i>Variables</i>	<i>With poverty line relative to consumption</i>		<i>With poverty line relative to GDP</i>	
	<i>Coef.</i>	<i>Std. Err.</i>	<i>Coef.</i>	<i>Std. Err.</i>
Poverty line relative to consumption or GDP	−78.691***	25.335	−68.371**	27.549
Consumption or GDP PC (2005 PPP\$, log)	−39.408***	6.239	35.042***	5.818
Income share of bottom 40% of population (%)	0.976	0.751	1.033	0.821
Rural population (%)	1.900	0.390	2.024***	0.536
Constant	187.061	60.846	139.559**	58.939
<i>N</i>	23		23	
Number of groups	5		5	
<i>R</i> -squared (overall)	0.455		0.438	

Note * $p \leq 0.10$; ** $p \leq 0.05$; and *** $p \leq 0.01$

areas. Although the income share of the low-income population typically explains a part of the variation in poverty rates (Wagle 2010), the insignificant coefficient of the variable that represents the income share of the bottom 40% suggests something different in this case. This is not fully surprising, however, given that the five countries do not vary much in this income share—ranging from 18 to 22% on average. But a significant part of the variation in poverty outcomes emanates from differences in private consumption or GDP per capita ($r^2 = 23\text{--}29\%$), something that encapsulates the role of economic conditions or living standards. Quite consistently, the negative coefficients indicate that greater levels of per capita consumption or GDP can help reduce poverty headcount ratios significantly.

Results show that the relative sizes of poverty lines are significantly related to poverty headcount ratios. The consistently negative coefficients suggest that, with other factors held constant, a 1% increase in the relative size of poverty lines leads to a reduction of poverty rates of almost 1% when consumption per capita is referenced and almost seven-tenth of a percent when GDP per capita is referenced. This finding is seemingly counterintuitive since setting poverty lines at a higher level relative to private consumption or GDP per capita is expected to increase, not decrease, poverty outcomes. This is also the argument espoused by governments or other institutions involved in developing poverty lines as they expect to keep poverty rates down. Nowhere would this be more beneficial than in casting the positive outlook of a country and in demonstrating how economic and social policy interventions have helped reduce poverty.

What can be more fundamental in the observation from these South Asian countries, however, is something different as it indicates what is expected for countries setting poverty lines at a higher or lower level with other things held constant. Countries setting relatively higher poverty lines, for example, are likely to invest greater policy resources in an effort to reduce poverty, which would then deliver results. Just like findings on the role of government expenditures reported elsewhere (Wagle 2009, 2010, 2012, 2014a), part of this observation is linked with the commitments made by governments and perhaps political leaders to meet political demands, on which setting higher poverty lines can be a favored policy strategy. Partly, it is also about the political strength and leverage in navigating through pressures and demands for market-based reforms that are in vogue today and that seek private market solutions to

social problems. Admittedly, there is no specific test to examine the reasoning behind this finding and the explanations provided here are more speculative than definitive. But while the internal realities and external pressures are more or less comparable across these South Asian countries, the negative relationship of poverty lines with measurement outcomes suggests something that goes beyond some narrower sense of cause-and-effect.

2.6 CONCLUSION

This analysis shows that politics have been an essential component of how poverty is measured and that this has enormous implications for policy interventions designed to reduce poverty. These politics of poverty measurement do not apply to all countries equally. Whereas countries with private per capita consumption expenditures over \$2000 and GDP per capita over \$5000 in 2005 PPP values have more or less comparable relative sizes of official poverty lines, those with lower consumption and GDP per capita values set their poverty lines at widely varying sizes. Poverty lines in middle-income countries could be increased to better align with their improving living conditions and needs, something that is essential from the relative poverty standpoint. But the ratio of poverty lines to consumption expenditures and GDP per capita could be more uniform across low-income countries that have similar living conditions and needs. The relative size of poverty lines has also declined significantly over time as indicated by the five South Asian countries, of which Nepal and Pakistan have maintained relatively consistent poverty lines. The general pattern has been to lower poverty lines even when economic performance and living conditions have improved.

Just because countries set relatively higher or lower poverty lines does not mean that politics are squarely to applaud or to blame. Some cultural or value systems that are likely to be shared within continents or geographic regions such as the Americas, Europe and Central Asia, and Latin America and the Caribbean can encourage linking poverty lines more effectively with applicable living conditions and needs. Other factors, such as population and economic and political contexts, do not significantly explain these variations. Findings indicate, however, that larger governments, as defined in terms of the size of government expenditure relative to GDP, maintain poverty lines that closely follow applicable living conditions and needs. More specifically, setting relative sizes

of official poverty lines at higher levels helps to lower poverty measurement outcomes in South Asian countries that have more comparable economic, political, and cultural contexts, once other factors are held constant. This last finding does not necessarily imply that setting higher poverty lines has a direct negative impact on poverty rates, since many factors, including policy intervention, come into play when determining final poverty outcomes. But getting poverty lines right is the first hurdle in attempting to reduce poverty given that the widely recognized, universal emphasis in today's globally integrated market-based reform appears to be that of taking a more hands-off approach. After all, the success of social policy interventions in part depends on accurate identification of the poor (Masud-All-Kamal and Saha 2014).

The most important message from this analysis is that the seemingly technical exercise of poverty measurement necessarily involves political choice. Because minor changes in poverty lines can have a major impact on poverty outcomes and, therefore, on the broader social policy interventions to follow, political choice is one of the major reasons why many governments set poverty lines without much attention to changes in underlying economic performance, living conditions, and needs. But because poverty refers to an economic inability to meet customary living conditions and needs that are specific to the given context, poverty lines ought to reflect ongoing changes in the societal progress and development. A proper alignment of poverty lines with the given reality is also an important political choice that the government has to make in order to set the agenda for broad-based development and poverty reduction. Since the aggregate data used here do not fully capture the politics playing out in practice, further research is required to ascertain the specific mechanisms through which political choices impact the otherwise purely technical process of developing poverty lines.

APPENDIX: COUNTRY LISTING AND DATA COVERAGE

Albania (2002), Argentina (1999), Armenia (1999), Azerbaijan (2001), Bangladesh (2000), Belarus (2002), Benin (2000), Bolivia (2001), Bosnia and Herzegovina (2001), Brazil (2003), Bulgaria (2004), Bukina Faso (2003), Cambodia (2004), Cameroon (2001), Chad (1996), Chile (2000), China (2002), Colombia (1999), Congo Republic (2005), Cote d'Ivoire (1998), Djibouti (2002), Ecuador (2001), Egypt (2000), Estonia (1995), Ethiopia (2000), Gambia (1998), Georgia (1997),

Ghana (1999), Guinea Bissau (1991), Hungary (1997), India (2000), Indonesia (1999), Jordan (2003), Kazakhstan (1996), Kenya (1997), Kyrgyz Republic (2003), Lao PDR (1998), Latvia (1995), Lesotho (1995), Macedonia FYR (1994), Malawi (2005), Mali (1989), Mauritania (2000), Mexico (2002), Moldova (2001), Mongolia (2003), Morocco (1999), Mozambique (2003), Nepal (2004), Niger (1993), Nigeria (1985), Pakistan (1999), Paraguay (2002), Peru (2000), Philippines (1988), Poland (1993), Romania (2001), Russian Federation (2002), Rwanda (2001), Senegal (1991), Sierra Leone (2004), Sri Lanka (2002), Tajikistan (1999), Tanzania (2001), Thailand (1992), Tunisia (1995), Turkey (2002), Uganda (1998), Ukraine (2002), Uruguay (1998), Venezuela (1989), Vietnam (2002), Yemen (1998), Zambia (2003).

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