Is Globalization Eliminating Income Poverty—Or Only the Utility of Measuring It?

Jim Glassman Department of Geography University of British Columbia

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Abstract

It is frequently asked what effects "globalization" is having on income poverty, with varied answers given—seemingly dependent in part on the political and theoretical orientations of those providing the answers. It is far less frequently observed that "globalization" might be seen as undermining the credibility of attempts to measure income poverty. I argue that taking the seriously the heterogeneity of global economic space being produced by neo-liberal globalization poses insuperable barriers to the employment of a meaningful and non-redundant concept of income poverty. This is not a result to be lamented, since recognition of it encourages more appropriate and relevant ways of examining poverty that pay adequate attention to the heterogeneous and socio-spatially complex contexts in which people's sense of the adequacy or inadequacy of their standards of living are formed.

Keywords: globalization, poverty, Thailand, World Bank

Introduction

On 1 March 2012, the World Bank provided an update on the "global poverty" statistics it regularly issues. Reporting on how revised assessments affect its estimates of the trajectory of global poverty over the last three decades, the Bank reported an impressive decline in the share of the world's population living on less than its official extreme poverty line income of US\$1.25 per day (adjusted for purchasing power parity with 2005 US dollars)—indeed an almost steady, but geographically variable, reduction from 52.2 percent of the world's population in 1981 to 22.4 percent of the world's population in 2008. The Bank acknowledged that poverty reduction has been less impressive if one uses its alternative, slightly less stingy US\$2 per day standard—dropping on this criterion from 69.6 percent of the world's population in 1981 to 43.0 percent in 2008. Still, as the Bank sees it, poverty reduction has been a success story by any measure, helping meet Millennium Development Goals earlier than expected and vindicating the Bank's preference for neoliberal and globalization-oriented strategies of economic growth and poverty reduction (Chen and Ravallion 2012; cf., Parsons 2012).

The Bank's pronouncements are hardly novel or unexpected. In debates on poverty and inequality, the Bank has consistently defended the fundamentally neoliberal position that globalization has reduced the numbers of people living in income poverty while also reducing global income inequality. In an article in *World Development*, nearly a decade ago, Robert Wade challenged these assertions. Noting empirical problems with the World Bank's data, Wade argued that poverty reduction has been minimal in absolute numbers, though the proportion of the world's population living below the US\$1 per day poverty line (in reality, US\$1.08 per day in 1993 US purchasing power parity-adjusted

dollars at that time) may well have declined. He also argued that income inequality has grown over the period since the 1980s, especially if one looks beyond the World Bank's population-weighted international disparity indicators. Finally, Wade called for a critical "political economy of statistics" that scrutinizes the ways in which statistics are produced and used at the World Bank—this towards the end of getting better data on poverty and inequality (Wade 2004).

Wade's article served as a powerful rebuttal to a number of widely-touted World Bank claims in favor of globalization—or, better, global neoliberalism (or neoliberal globalization), and it should rightly have led to more circumspection at the Bank regarding claims about poverty. Indeed, the Bank's leading economist on poverty issues, Martin Ravallion, was directly embroiled at the same time in telling debates with Sanjay Reddy and Thomas Pogge, debates which raised crucial issues for which Bank poverty methodologists had no real answers (Reddy and Pogge 2003; Ravallion 2003). Yet the Bank's economists have proven impervious to serious criticism, as evidenced by the fact that the same papers forming the Reddy-Pogge/Ravallion debate in 2003 could be published seven years later virtually without alteration (Reddy and Pogge 2010; Ravallion 2010a, b; Pogge 2010). Moreover, the fact that the Bank could produce its new 2012 statistics touting further success in reducing "global poverty," while using fundamentally the same problematic methodology as in all its earlier studies simply reconfirms that the Bank has a particular political agenda, not an intellectual project (Chen and Ravallion 2012).

It should be clear, then, for those who heed Wade's call for a critical political economy of statistics, that there is little utility in ongoing efforts to "get the ear" of the

World Bankers on this matter. As such, with a different audience in mind I wish to carry some of the critics' arguments further, suggesting even deeper *conceptual* problems than they have in the ways the World Bank and many other organizations analyze poverty in relationship to neoliberal globalization. These conceptual flaws not only undermine the World Bank's assertions regarding general effects of neoliberal globalization but call into question the validity of claims regarding income poverty reduction, even in the case of developing countries that have been hailed by the World Bank as success stories. More importantly, I claim, they undermine the conceptual validity of the entire project of estimating income poverty levels—though they obviously do not undermine the political utility for the Bank and other organizations in continuing to produce such statistics.

Specifically, I argue for the following claims. In the first section of the paper, I review and elaborate on the critics' evidence that income poverty is inadequately measured in the kinds of the studies the World Bank produces and employs. As I will show, this is not merely because of technical shortcomings. Rather, the technical problems reflect fundamental conceptual shortcomings inherent in the notions of poverty used by the World Bank, and most national governments, in their major publications on poverty statistics. Moreover, reconsideration of the conceptual shortcomings in World Bank publications forces to the forefront the debate about the relationship between poverty and inequality. I note that even if one accepts arguments for measuring poverty in relation to a defensible "absolute" standard, nonetheless poverty and inequality are not completely distinct metrics but are integrally related to one another. This has the consequence that even if poverty is taken to be "absolute," a robust conception of income poverty is still related to income distribution and its effects.

In the second part of the paper, I carry the critical analysis beyond the arguments presented by Wade, Reddy, and Pogge, arguing that the World Bank ignores the impact of one of the major features of neoliberal globalization that has crucial effects on livelihoods and perceptions of well-being: the increasing complexity and heterogeneity of global economic space, abetted by uneven but transnational flows of information and consumption ideals. Since poverty is inherently a relative concept, even when taken to be "absolute," the perception of poverty always involves a reference group that is seen as exemplifying a life of material adequacy. Neoliberal globalization complicates considerably the issue of determining the appropriate reference group for defining what constitutes a life without poverty. Indeed, I suggest that neoliberal globalization because it is both pervasive and productive of highly uneven economic outcomes—makes determination of the appropriate reference group impossible for practical purposes. I label this the "Heisenberg Uncertainty Principle of Income Poverty" and argue that because of it we cannot really know in any meaningful sense if neoliberal globalization is reducing (or increasing) poverty, though we can assert that it is undermining our ability to meaningfully deploy the concept of income poverty.

Finally, I suggest significant practical consequences of the position that neoliberal globalization is undermining the ability to meaningfully measure income poverty. Far from what defenders of World Bank quantification practices contend, measures of income poverty are not only unneeded as tools for effective public policy but are much more likely to get in the way of effective policy while serving as misleading rhetoric that shields neoliberalism from deserved criticism. More important, for those who are critics of World Bank and neoliberal policies, it should be recognized that the abandonment of

attempts to measure income poverty does not impair efforts to highlight the injustices of neoliberal globalization; far from it, abandoning the conceptually impossible task of quantifying "global poverty" frees critics of neoliberal globalization to address more powerfully its actual impacts on material well-being, inequality, and social struggle.

Throughout my discussion I make reference both to global data on poverty and income distribution and specific country-level evidence from Thailand, a country that constitutes an extremely useful case for interrogating World Bank claims because it has been regarded as a huge neoliberal success story (e.g., Warr and Bhanupong 1996; Krugman 2000), leading the world in economic growth rates during 1986-1996 and recording substantial official reductions in income poverty even in a context of increasing inequality. Insofar as the Thai case can be shown to problematize the conception of poverty reduction favored by the World Bank, the argument against this conception might be considered even stronger in the cases of countries that have been less economically successful in the era of neoliberal globalization.

Part One: Conceptualizing and Measuring Absolute Poverty

Neo-liberal Globalization and the Measurement of Poverty: Two Foundational Claims

Foundational Claim One: On Global Capitalism and Neoliberal Globalization

Quite a few claims about the effects of globalization on poverty and income distribution have been put forward without any attempt to clarify what is meant by "globalization" or to deploy a historical chronology that would make sense of the development of neoliberal globalization. In some cases (e.g., Bhalla 2002), 1980 is rather arbitrarily taken as a starting point for "globalization" without discussion of important

changes that were occurring in the global economy long before then, such as increased transnational corporate activity in the 1960s, the breakdown of the Bretton Woods system in the early 1970s and the ensuing "financialization" of the global economy under a floating exchange rate regime, and the beginnings of "structural adjustment" within the Global North (especially the United States) during the mid-1970s (Dumenil and Levy 2004a, b). To avoid such problems, I refer to specifically *neoliberal* globalization and do not mark a date for its onset but refer to a complex, extended process that began in the 1960s and was not really complete until the end of the Cold War in the late 1980s and the emergence of China as a global economic dynamo in the early 1990s.

Weak conceptualizations of globalization obviously make problematic any attempts to assert that globalization is reducing income poverty, but these problems of recent chronology only brush the surface of the difficulties. As quite a few studies of globalization and capitalist development have argued, many aspects of global economic integration in the neoliberal era are by no means novel, and some—such as global trade, investment, and migration flows—scarcely exceed the levels achieved in the period from the mid-19th century up to the outbreak of the First World War, after which there was a weakening of global integration processes until after the Second World War (Hirst and Thompson 1999; Rodrik 2011). Perhaps one of the truly distinguishing features of neoliberal globalization, as compared to the globalization of capital that occurred in the 19th and early 20th century, is the increased volume and intensity of financial flows (Hirst and Thompson 1999), which justifies characterizing neoliberal globalization as a process through which financial capitalists have exercised specific forms of class-fractional power (Dumenil and Levy 2004a; Harvey 2005; Krippner 2005; McNally 2009). Yet

even recent financialization of capital in response to declining profit rates is not a historically unique phenomenon but is characteristic in times of crisis and restructuring throughout the history of capitalism (Braudel 1981-1984; Arrighi 1994).

The significance of this *longue duree* view of capitalist development to debates about income inequality is direct because much of the contention regarding current trends is misplaced if these are seen in isolation from longer-term developments. A number of recent studies have claimed to find increasing global (or "world") income inequality in the period of neoliberal globalization (e.g., Dikhanov and Ward 2001; Bourguinon and Morrisson 2002; Milanovich 2002; Dowrick and Akmal 2003; Wade 2004; Milanovic 2007; 2010), while others (e.g., Bhalla 2002; Sala-i-Martin 2002; Firebaugh 2003) have claimed to find declining income inequality over this same period. The finding of declining inequality hinges in part on the use of purchasing power parity (PPP) measures of income, since when foreign exchange rate equivalents are used the evidence for increasing inequality is overwhelming. PPP equivalents are likely to be problematic or even inappropriate in a context where rapid economic change has led to divergence of the price structures of different national economies (Dowrick and Akmal 2003; Milanovic 2007), as evidenced by the fact that the World Bank conceded in 2008 that its previous PPP estimates had overestimated the size of China's economy by a whopping 40 percent (Shen and Ravallion 2010). Even using PPP measures, however, most studies—including those cited above—have found increasing income disparity in the neoliberal era.

Nonetheless, if one evaluates recent changes against the backdrop of (necessarily somewhat tentative) assessments of long-term changes in income distribution (Bourguinon and Morrisson 2002), it would be fair to concur with the judgment of

Ravallion that there has not been a significant overall trend in global income disparity during the period since the 1970s (Ravallion 2003), at least compared to earlier periods of globalization. Rather, the picture that emerges from the long-term global income distribution study undertaken by Francois Bourguinon and Christian Morrisson is of substantial increases in global income inequality between 1820 and 1950—these generalities masking some changing temporal and geographical patterns that the authors also document—with relatively smaller increases in inequality between 1950 and the present (Bourguinon and Morrisson 2002; Milanovic 2007; 2010).

The changing geography of global income inequality is especially interesting and is important to my argument below. The overwhelming source of growth in global income inequality between 1820 and 1950 was changes in the average incomes of different countries, this corresponding the development of a global "core-periphery structure" (Bourguinon and Morrisson 2002; Milanovic 2007; 2010). Indeed, between 1910 and 1950 income disparity within core countries declined slightly, and thus the overall contribution of within-country disparities to total world income inequality came to be substantially less than the contribution of between-country disparities (Bourguinon and Morrisson 2002). In the period since 1950, and especially since the 1970s, this geography has begun to shift slightly, so that while between-country disparities still account for most of world income inequality it is within-country disparity that has increased the most in the era of neoliberal globalization (Ward and Dikhanov 2003). This corresponds to increasing socio-spatial complexity within many "peripheral" countries—China being an obvious example, with enormous differences in incomes both between

coastal and inland regions and between cities and surrounding agrarian communities in both coastal and inland settings (Glassman 2010).

The importance of these issues in income distribution and historically uneven development for poverty assessment will be clarified below. At this point, the take-home message regarding inequality is straightforward: the world became a much more unequal place over the 19th and early 20th centuries and has remained highly unequal to the present, with comparatively less change recently in the overall levels of inequality despite important specific changes in the trajectories of particular social groups and national economies during the era of neoliberal globalization (cf., Babones 2002; Milanovic 2007; 2010). In this sense, neoliberal globalization, in spite of (or because of) the global financial integration with which it is associated has continued to produce and reproduce the kinds of uneven development that already existed prior to the neoliberal era, while also producing increasingly diverse economic landscapes within all areas of the world. Increasing global integration is no doubt occurring, but this is not resulting in homogeneous economic spaces. Rather, capital, people, and goods all continue to move in highly geographically varied patterns (Webber and Rigby 1996; Dicken 2007; Sheppard et al. 2008; Glassman 2012), with marked indications of both differential patterns of regionalization (Hirst and Thompson 1999) and reproduction of global coreperiphery structures (Babones 2002; Gwynne et al. 2003; Milanovic 2007; 2010).

Most importantly for my argument below, however, and corresponding to increased within-country disparity, neoliberal globalization has undermined even the appearance of homogeneous national economic spaces that marked the era of high Fordism and Keynesianism (1945-1965), resulting in a world of increasingly

heterogeneous and highly fragmented economic spaces (Brenner 2004). Nation states continue to be the major mediators of economic processes, but the spaces they govern can no longer be conceived (if they ever could) as homogeneous territories. Rather, formal state territories are traversed in uneven ways by global commodity chains and world city networks (Wallerstein 1979; Taylor 2000, 2004; Glassman 2012) while being shot through with—and constituted by—complex sub-national, national, and transnational spatial patterns that are simultaneously territorial and networked (Sheppard 2002). These heterogeneous spatial structures challenge both the national governance capacities of states and the nation state-centric basis for statistically evaluating economic phenomena (Agnew 1994; Taylor 1996; Glassman 1999). This conception of neoliberal globalization as part of a longer-term, uneven process that creates heterogeneous economic landscapes complicates considerably the evaluation of income poverty.

Foundational Claim Two: On Poverty and Physical Quality of Life

For reasons I will explain shortly, I deal in this paper with the concept of *income poverty*, while noting its relationship to broader conceptions of poverty. Two seemingly obvious but sometimes neglected stipulations need to be made in explaining what I take income poverty to be. First, income poverty *should not* be taken to refer to an arbitrarily determined level of income, with arbitrary taken here to mean—among other things—a level that is simply chosen by economists and state planners for their convenience.

Rather, the level of income designated as necessary to live a life without poverty should be shown to relate to broadly accepted conceptions of what is needed materially and socially for an acceptable life. Poverty necessarily has much to do with broader social

arrangements for which income may not be the best indicator—such as access to natural resources and social services—but income poverty standards should at least represent a serious attempt at determining the financial requirements for the forms of material consumption and social activity necessary, even if not sufficient, to a materially and socially acceptable life. Naturally, it is in fact the stated goal of income poverty lines to capture precisely this kind of material and social necessity. But, as I will suggest with regard to the World Bank's various US\$1 per day income poverty lines, in the actual operationalization of poverty concepts the World Bank and other organizations slide into the use of poverty lines that have no particular relationship to serious conceptions of what would be needed for a materially and socially adequate life.

A second, less obvious stipulation is equally important. Although income poverty may well imply inability to meet whatever are designated as basic requirements for an acceptable physical quality of life—e.g., levels of nutrition, health, longevity, education, etc.—income poverty cannot be reduced merely to inadequate physical quality of life. The reason for this is two-fold. On the one hand, if income poverty is understood only as inadequate means to achieve a basically acceptable physical quality of life, then it turns into an entirely redundant concept, and a poor one at that, since it is possible to get more directly at issues such as the percentage of a population that is illiterate, that lives on less than a specified level of daily calorie consumption, or that dies prior to a particular age, without the diversion of attempting to convert the data on these indicators into a "poverty line." On the other hand, "poverty" is a term that has clearly been used by most people in an attempt to capture more than physical quality of life, and so to both avoid redundancy and to deploy the concept in a way congruent with broad usage, income poverty needs to

refer not only to situations in which physical quality of life may be inadequate but in which life may also be deemed inadequate according to broader criteria such as the inability to consume specific kinds of goods considered by the poor to be necessary for their well-being.

Even were they to meet these two stipulations, there are definite and well-known limitations to studies that only address income poverty, rather than engaging in broader assessments of social and structural factors that might affect living standards—such as access to productive resources that enable non-market production and consumption of food, clothing, and shelter. Because of these limitations, any number of critics of official poverty statistics have regarded the concept of income poverty as a construct designed to solve problems that many of the world's less cash-rich people haven't necessarily known they have—including raising their incomes rather than resolving issues such as access to land, resources, and social services. From this recognition there has developed a fairly powerful post-developmentalist attack on the concept of poverty (e.g., Escobar 1995; Yapa 1996), as well as an attempt to study what poor people themselves identify as their needs through participatory poverty assessment (PPA) exercises, some of which will be examined below.

While the post-developmentalist critique raises important points—and indeed resonates with certain arguments I will make here—it can also be argued that it neglects real problems that have affected the lives of many people with limited cash incomes, and which have in fact been asserted as problems by such people whether or not they are referred to as living in poverty. Moreover, even granted that cash incomes are not equivalent to well-being, it can be argued that increasing monetization of economic

processes with the expansion of capitalism makes possession of cash income a necessary (even if not sufficient) condition for well-being throughout most of the world today. Cash incomes enable effective claims on certain kinds of resources, commodities, and services, and in this sense they constitute a fairly straightforward measure of economic power. Studies of income poverty and distribution cannot really meaningfully claim to be more (or less) than this since they are not a substitute for direct measurements of material well-being—and since such direct measurements of material well-being are not substitutes for studies of the claims that different people's incomes allow them to make on resources, commodities, and services. As such, I will assume here that measurement of cash incomes is a valuable way to get at important features of people's lives and livelihoods—features that are crucial for poverty assessment—but should not be substituted for either more direct measurement of material well-being and physical quality of life or for analysis of structural social relations that affect economic power. Moreover, I will utilize some of the information collected in World Bank PPAs to suggest how income poverty might be thought about in relation to the objectives of poverty reduction in a broader sense.

Summarizing these points, the stipulated requirements for a usable and non-redundant conception of income poverty are as follows: (S1) it should not be based on an arbitrary designation of a particular income level as a "poverty line" and should take seriously broad, popular conceptions of what constitutes poverty; (S2) it should not reduce poverty merely to a situation of inadequate physical quality of life and should be based on an attempt to specify the levels of income necessary to purchase material goods and services required for both an adequate physical quality of life and adequate material

consumption beyond this; and (S3) it should not be proposed as a substitute for broader conceptions of poverty that address social and structural features of poverty for which increased cash incomes may not be relevant, but should be seen as indicating necessary, if insufficient, material conditions for alleviating poverty in these broader senses. These would seem fairly straightforward criteria to meet. As I will argue, however, the income poverty studies produced by the World Bank and other organizations do not meet any of these criteria, and under conditions of neoliberal globalization they cannot do so.

The World Bank and Thai Government Approaches to Poverty

Defining and Operationalizing "Poverty"

Arguably, some of the most sustained and thoughtful attempts to articulate a coherent, absolute conception of poverty consistent with the above criteria are contained in the writings of Nobel laureate Amartya Sen (e.g., Sen 1983, 1987, 1992, 1997). Sen's arguments for defining poverty in terms of human capabilities are by now well-known and I will not review them here. Instead, I want to simply note one important feature of Sen's approach. Arguing against an entirely relativistic definition that measures poverty only in relation to distribution of income, Sen has defined poverty in terms of the ways in which incomes are translated into specific human capabilities, retaining a more absolute conception of poverty by locating its fundamental meaning within this "space" of capabilities. Notably, this approach admits of a certain necessary relativism: relativism enters in through assessment of what kind of material consumption allows people to achieve particular levels of functioning within a given space-time.

Following the insights of Adam Smith and others, Sen notes that the concept of poverty does not refer to a simple, static measure of basic needs provision but implies the ability "to lead a life without shame, to be able to visit and entertain one's friends, to keep track of what is going on and what others are talking about" (Sen 1987, 18). Moreover, the specific forms in which people may fulfill such basic functionings "tend to vary from society to society" (Sen 1992, 110). This is because the forms of consumption necessary to basic material well-being vary from society to society, as well as in relation to the society's development over time (Ravallion 2010a). This simple conceptual point creates enormous challenges in operationalizing a robust conception of poverty.

Consider, for example, the most conventional way of determining income poverty, via the "head count" measure. This is done by determining a "poverty line" basket of consumption goods—the minimum amount of consumption goods required to live just above poverty, which I will call here the "poverty line consumption basket"—and then determining what percentage of a given population fails to receive income (or is unable to produce income equivalents) sufficient to procure at least this poverty line basket of goods. Typically, the poverty line consumption basket is divided into food and non-food components. Determination of how to measure each of these, and what to set as a minimum non-poverty level of each, involves enormous complications.

The food component of the poverty basket is conceptually the most straightforward of these two components, but even it is not in truth straightforward, as can be illustrated by the case of Thailand's poverty measures (see, also, Ravallion 1998). From 1975 through most of the 1990s, the Thai government set the minimum amount of food necessary to live above the poverty line on the basis of a 1970s World Bank

nutritional survey. Based on this assessment of a specific minimum required number of calories of given food items such as rice and the cash income necessary to purchase this amount of caloric intake on the market, the Thai government determined a minimum food income component of the poverty line consumption basket, adjusting this each year for inflation in food prices (Medhi 1996, 21-22).

This method became problematic with the passage of time and also begs a number of questions about how to determine adequate minimum food intake. The method became problematic over time for a number of reasons, including the fact that the average height and weight of the population increased (Kakwani and Medhi 1996; Medhi 1996, 22). Medhi Krongkaew noted in 1996 that more current assessments of nutritional requirements indicated that using the 1970s surveys led to underestimation of nutritional requirement by around 2.8 percent (Medhi 1996, 23). In principle, this problem could be handled by simply producing new nutritional assessments for every new poverty survey. But the problems of determining the minimum food basket are potentially conceptually deeper than this.

Consider the problem of how to determine what constitutes minimum adequate nutrition. Nutritionists may be able to assert—certainly not without controversy—a minimum level of nutrition necessary for a certain level of physical functioning. But what level of physical functioning should be regarded as the standard? Need nutrition levels be adequate only for a relatively bare level of survival? And if so, over what lifespan, since nutritional intake that is adequate for current survival might nonetheless be inadequate to prevent forms of slow physical degeneration that will shorten life. Should levels of nutrition that are adequate for basic functioning but not for high levels of

physical activity such as strenuous labor or athletic activity be considered adequate? If so, do we consider someone as *not* living in poverty if they can consume enough food to survive indefinitely but not to have chances for certain types of employment that will be available to the better nourished? Moreover, who is to determine in what form people should be able to consume the minimum caloric intake, particularly in times when society and peoples' tastes are changing? If "adequate" calories can be procured more cheaply by eating sticky rice, for example, but if people come to consider consumption of such an item a mark of poverty and prefer to take their calories from more expensive sources such as jasmine rice or noodles, should the minimum food income requirement be changed to reflect this? If not, is the assumption which is being made that people's self-conception and current tastes are irrelevant to the assessment of poverty? Finally, should the poverty line food basket factor in changes such as the desire to purchase bottled water in order to avoid high levels of contaminants and toxic chemicals in tap water? If not, is it being assumed that an income only adequate to drink contaminated water that may lead to illness and reduced life expectancy is *not* a mark of poverty?

Clearly, answers can be given to these kinds of questions, but probably not uncontroversial ones (Ravallion 1998). Moreover, the Thai government's practice of using a very static measure of the minimum food requirement over the course of several decades illustrates that many governments may be measuring the minimum food requirement in ways that would not be accepted by groups who think that poverty measures should evolve in response not only to changing nutritional needs but also to changing social standards, tastes, and health requirements. Finally, it needs to be noted, too, that as societies industrialize and undergo agrarian transformation the percentage of

consumed food that people have produced themselves declines, so a less static poverty line food basket would have to be adjusted not only for changing tastes and standards but for relatively higher income requirements in order to purchase foods previously produced and consumed in greater amounts outside the market.

In sum calculation of the food component of the poverty line consumption basket is scarcely straightforward and is frequently carried out by major governmental agencies in ways that fail to meet the requirements of S1. Illustratively, in 1996, at the end of a period of very rapid economic growth in Thailand, Medhi and Nanak Kakwani produced new poverty lines for Thailand that made somewhat more generous nutritional allowances, taking into account the considerations discussed here, and on this basis alone found that national incidence of poverty in 1994 would have been 14.3 percent of the population, rather than the official figure of 9.6 percent (Kakwani and Medhi 1996; Figure 1).

[INSERT FIGURE 1 HERE]

All of these conceptual and methodological difficulties pale in comparison to the challenges of determining the non-food component of the poverty line consumption basket. The basic problem here is that it is inevitably excruciatingly controversial to determine just what amount of non-food consumption should be seen as enough to constitute living above the poverty line. Medhi notes that the Thai government sets the non-food component of the poverty line consumption basket at the average non-food expenditure of the bottom quintile of the population, presumably for the reason that no adequate surveys of non-food needs have been undertaken (Medhi 1996, 24). But the problem here is not merely that no adequate surveys have been conducted since it is not

clear how such surveys should be constructed. The amount of non-food consumption required to live a life without poverty impinges not only on physical functioning but on psychological and emotional criteria such as how much of various goods a person needs not to feel underprivileged or deprived of opportunities enjoyed by others. This can be highly variable between individuals and moreover will change dramatically over time in societies undergoing rapid social and economic transformation. For example, a Thai villager who did not have a motorcycle or a telephone in 1950 might not necessarily feel severely deprived compared to most other Thais, but by the 1970s such a villager might be deprived of urban job opportunities available to those with greater mobility, and by the 1990s such a villager would be deprived of opportunities to communicate with others in ways that are enjoyed by a very large number of Thais.

Clearly, in societies undergoing rapid transformation, meeting Sen's criteria involves hitting a moving target: what is required to lead a life without shame, entertain one's friends, and keep track of what is going on can come to differ significantly over the course of several decades' development. Typically, as societies undergo urban-industrial transformation, the percentage of total income that most people spend on food declines (Ravallion 2003; 2010a), implying that evolving non-food consumption requirements (and expectations) expand proportionately. But short-cuts to determining what is an adequate amount of non-food consumption such as taking the average non-food expenditure of the poorest quintile are clearly inadequate and fail to meet the requirement of S1. What if everyone in the poorest quintile considers their non-food consumption insufficient to allow them the opportunity to lead a life without shame in the society around them? In this case, using their average non-food consumption expenditure to

determine the non-food component of the poverty line consumption basket will produce an artificially low poverty line—unless we wish to simply discount these self-perceptions of poverty. And, if so, it might well be asked who the "we" is that is able to engage in such discounting.

As one more example of the difficulty of determining the non-food component of the poverty basket in non-question begging fashion, consider the approach argued for by Ravallion, who has probably more than most taken Sen's conceptions seriously and ruminated on how to operationalize them. Ravallion suggests a method for determining non-food requirements that involves making the following crucial assumption: once *survival* food needs are satisfied, as total expenditure rises, basic non-food needs will have to be satisfied before (broader, beyond-survival) *basic* food needs (Ravallion 1998, 18). The function of this assumption in making it conceptually possible to determine non-food requirements is straightforward. Since it is at least plausible (if difficult) to conduct surveys of food consumption expenditure and to specify the income levels of groups which consume the minimal nutrients associated with "basic food needs," the assumption that these basic food needs will be met only *after* basic non-food needs allows economists to designate people who meet these basic food needs as having incomes necessary for an adequate level of non-food consumption.

Ravallion's argument here represents one of the few attempts to develop a conception of income poverty that meets the requirement of S2. Yet the effort fails because the assumption regarding spending priorities is not persuasive and makes the associated method of determining non-food consumption requirements question-begging. Ravallion asserts that "...many activities one would readily deem essential to escaping

poverty cannot be performed without participation in society; for example, this is true of employment, schooling, and health care...Since such a set of non-food goods is required *before* one participates in society, these must naturally take precedence over even quite basic food requirements beyond survival needs" (Ravallion 1998, 17-18).

Even granting the grain of truth in the notion that people will sometimes spend on non-food needs when they could use more food, the idea of a strict hierarchy of basic needs that determines the chronology of individual actions—"survival food needs, basic non-food needs, and then basic food needs" (Ravallion 1998, 18)—is nonsensical. First of all, it assumes that people readily and easily distinguish between when they have consumed just enough food to meet some (temporally indeterminate) threshold of survival, then immediately devote all additional increments of income to purchasing all non-food items necessary to participating without shame in (indeterminate activities in) society before engaging in increased food consumption. It seems more likely that people living close to the subsistence minimum would be inclined to purchase—or save money for—food in quantities beyond what is required for mere survival to guard against hunger or starvation in the event of further adversity, a practice that has been observed and studied by anthropologists and others (cf., Scott 1976). Moreover, it seems more likely that people who feel some security about having met immediate food survival needs will spend money variably on food and non-food items, depending upon specific conditions they face, rather than mechanically first meeting non-food requirements then additional food requirements. Insofar as this is a more likely picture of how people will spend limited incomes, the problem of determining when people have met the non-food consumption needs for a life without poverty remains unresolved. Notably, the questionbegging method Ravallion suggests here has not actually been implemented by the World Bank in its global poverty assessment exercises, so World Bank poverty statistics fail to meet the requirements of S2, independently of Ravallion's suggested method for operationalizing Sen's Smithian insights regarding the experience of poverty.

While such a conclusion might be unsatisfying to economists attempting to operationalize conceptions of income poverty, it is a conclusion that makes much sense of the discrepancies that are frequently evident between official definitions of poverty provided by state agencies and the conceptions held by many people of the incomes required for a decent life. As one example, in 1995, at the end of the decade-long economic boom and at a time when employers were complaining of unprecedented wage increases eroding profits, the Arom Pongpangan Foundation (a Bangkok-based labor NGO) conducted a survey of the incomes and expenditures of factory workers in the Samut Prakan industrial district, part of the Bangkok Metropolitan Region (Table 1). According to these workers' reports of incomes and expenditures, their daily pay only amounted to about two-thirds of what they required in the way of minimum daily expenditures, the remainder being made up where possible by borrowing. The outlays these workers listed for different items were hardly lavish, but it is notable that they include some items that perhaps a hard-headed economist would consider profligate such as small amounts for donations to temples. Yet how is one to assert that a group of people are able to lead a life without shame in the society around them if they are not able to engage in activities—such as donating to religious organizations or even perhaps political associations—available to many others in society and which they themselves consider important to their well-being? Assuredly, these workers in Samut Prakan were

not counted among the poor in Thailand's official poverty statistics (Figure 2), and to their employers they may even have appeared overpaid. Yet they equally assuredly considered themselves poor, in part at least on the basis of their inability to spend adequately on certain items that they considered minimal requirements for a decent life. [INSERT TABLE 1 AND FIGURE 2 HERE]

There is clearly no uncontroversial or straightforward path through this thicket. Value-laden decisions must be made, and indeed they are by organizations such as the World Bank and the Thai government. That the resulting poverty measures are thus *political* is not consequently an inherent shortcoming—*all* poverty measures *necessarily* embed political judgments, as World Bank economists sometimes acknowledge (Ravallion 2003, 4-5). What is most problematic about the World Bank and Thai government measures is not that they are inherently politicized and controversial but rather that when they are presented as if they are not—as in many public pronouncements about poverty reduction—their politicized assumptions are shielded from deserved scrutiny, in this case, a scrutiny that would reveal their failure to meet the requirements of either S1 or S2.

The World Bank's "Extreme Poverty Line"

The World Bank's official poverty statistics are not only politicized in a very specific way but are even weaker conceptually than the Thai government's statistics. As Sanjay Reddy and Thomas Pogge note, the World Bank's poverty statistics are not based on a poverty line drawn in relation to surveys they have done of consumption needs—either for non-food items *or* for food (Reddy and Pogge 2003, 5; 2010). Instead, taking

the poverty lines already used by 33 low income countries, the World Bank constructed an arguably arbitrary global poverty line of US\$1 per day, in 1985 purchasing power parity (PPP) prices, adding a second line of US\$2 per day for comparison. The most that advocates of these lines have been able to argue is that no one could regard someone making less than US\$1 per day as *not* being poor (Ravallion et al. 1991). This is clearly a defensive posture struck in response to critics from the far right who consider the World Bank's standard of income poverty to be unduly liberal. It does not address far more serious criticisms from groups that might justifiably consider the US\$1 per day standard to be far too low and as failing to meet the requirements of S1 and S2.

Reddy and Pogge note a host of problems in the World Bank poverty lines, leading them to conclude that World Bank estimates of income poverty are "neither meaningful nor reliable" because they employ "an arbitrary international poverty line unrelated to any clear conception of poverty" (Reddy and Pogge 2003; 2010). Notably, the World Bank's poverty line shows its weaknesses especially clearly in its application to the United States. Since the Bank uses PPP-adjusted incomes in its poverty estimates rather than exchange-rate equivalent incomes, and since the PPP-adjusted incomes are calibrated to US dollar purchasing power equivalents in 1985 (later 1993 and then 2005) dollars, one would assume it matters what the actual purchasing power of these equivalents are in the United States. Yet Reddy and Pogge note that according to a US Department of Agriculture study the minimum daily income that someone in the United States would have needed in 1985 in order to procure necessary nutrition was US\$2.27 (Reddy and Pogge 2003, 8). This means that not only the Bank's US\$1.08 (1993 PPP) per day poverty line but its more generous US\$2 per day poverty line would leave its

recipients short of the cash income necessary to procure minimal nutrition, with nothing left over for other necessities such as clothing, shelter, and transportation.

Part Two: The Relativity of Absolute Poverty

Relative Measures of Poverty

Poverty and Income Inequality

What the preceding discussion highlights is that even absolute poverty is always inherently relative in a variety of important respects. Where food consumption is concerned, what constitutes poverty is relative not only to the size and shape of one's body and its various potentials but to evolving societal standards regarding what constitutes an adequate, appropriate, or healthy diet. Where non-food consumption is concerned, what constitutes poverty is relative not only to specific contexts (e.g., those living in colder climates may require more income for adequately insulated shelter or warm clothing) but to changing consumption norms and possibilities within given societies over time.

In this respect, the entire exercise of separating the measurement of poverty from the measurement of income inequality can be seen as problematic and as failing to meet the requirement of S2 and S3. The standard method for building distributional considerations directly into the measure of poverty—and the kind of method to which Sen has juxtaposed his own efforts—is to designate one-half of either a country's median or mean income as the poverty line. Though I do not argue here in favor of using such alternative measures, it is worth noting the significantly different results they generate and the differing politics they imply. Since the kinds of poverty measures favored by Sen

and the World Bank are themselves politicized and difficult to adequately operationalize, there is no *a priori* reason to reject "relativistic" measures of poverty on the grounds of their politicization.

Those who advocate using explicitly relativistic measures are openly recognizing income inequality as a component of poverty. Using one-half the mean or the median as the standard, it is difficult to achieve substantial reductions in poverty at the same time as income disparity is growing. Yet this has been precisely the core strategy of much neoliberal policy, enabled by dividing poverty off conceptually from inequality, which allows governments and organizations like the World Bank to announce substantial reductions in poverty in spite of—or even because of—increasingly skewed income distribution. Indeed, from a neoliberal perspective, encouraging increasing income disparity, by allowing some (the most entrepreneurially-motivated, the better trained and educated) to get rich first and allowing the wealth thus generated to trickle down, is often seen as a reasonable approach to poverty reduction. Moreover, those who favor such an approach can cite Simon Kuznets' modernization theoretic argument that in developing countries income disparities will "normally" increase in early stages and decline later in order to justify socially unbalanced growth not only as a strategy for poverty reduction but for longer-term economic justice (Kuznets 1956).

For those who favor such an approach, however, measurements of poverty such as one-half the mean or median income threaten to rhetorically deligitimize the strategy.

Even if there is in fact a Kuznets-style developmental U-curve (and this is contestable on the basis of the empirical evidence) the early stages in which income disparity increases will not likely produce legitimizing reductions in poverty if poverty is measured in a way

that relates it to income distribution. Indeed, conservatives have long understood this point and for this reason have opposed the use of one-half the mean or median income as the poverty line on the grounds that it implies "the poor will always be with us" –at least insofar as income distribution remains skewed in the fashion preferred by societal elites (Sen 1992; Ravallion 2003). This protest notwithstanding, it is not clear why a poverty measure that relates the phenomenon to income distribution—if not one-half the mean or the median income, then some other measure—is inherently any more problematic than the World Bank's US\$1 per day standard. Indeed, most of the conceptual problems in determination of a conventional, absolute poverty line that were previously discussed stem from the fact that poverty *is* related to income distribution, at least in the experiences of those who are poor.

Industrial Transformation and the Relativity of Absolute Poverty in Thailand

Thailand provides a useful example of the relativity of absolute poverty. As late as the 1960s, the possession of a motorcycle could be taken by many villagers as a sign of profligate consumption, as indicated in Khamman Khonkhai's popular novel *Teachers of Mad Dog Swamp* (*Khru Baan Nork*; Khamman 1982). By the 1970s, with income disparities in Thailand growing rapidly and the majority of Bangkokians beginning to use motorized transport, the failure to have access to such transport put villagers who migrated to the city in the position of having to live in the marginal neighborhoods near work or in factory dormitories, and also limited the places they could shop or go for entertainment (other than places on low-cost bus routes, which would commit one to much longer commuting times). By the 1990s, with income disparities at their highest

since they have been measured (Glassman 2004, 162), most Bangkok workers (whether recent in-migrants or not) did possess motorcycles, but wealthier Bangkokians by now mainly drove cars or traveled by more expensive air-conditioned buses (and, today, on the yet more expensive light rail transit system). While the generalized possession of motorcycles enables poorer members of Thai society to participate more fully in the life of the society, this is a form of transportation with serious costs. One is the tremendous levels of air pollution that the cycles help generate, which are breathed most directly by motorcycle drivers and pedestrians, contributing to high levels of respiratory ailments (Glassman 2010). Another is the high rate of transport fatality, experienced to a much greater extent by motorcycle drivers and riders than by those using automobiles or buses (Glassman 2001).

If, in recognition of this kind of relativity to the experience of poverty, one were to take one-half the median or mean income as the official poverty line, Thailand's performance in poverty reduction would look quite different than it does in official statistics (Figure 3). For example, official national poverty incidence in 1994 was 9.6 per cent of the population, while Kakwani and Medhi's revised poverty lines place the national incidence of poverty for that year at 14.3 per cent (Kakwani and Medhi 1996). My own estimate of the percentage of the national population that would be counted as living in poverty if one were to use one-half the national median income is about 31 percent, and if one were to use one-half the national mean income the percentage would be about 34 percent. Moreover, as Figure 3 shows, using either one-half the national median or mean income results in different *trajectories* in poverty reduction over the years 1988-1994: while incidence of poverty in Thailand declines according to both the

official Thai poverty lines and Medhi and Nanak Kakwani's revised poverty lines, poverty increases if one uses one-half the national mean or national median income. Discrepancies of this magnitude show that much is at stake in the determination of whether or not to measure poverty relative to the standards of living made possible by growth of incomes among richer members of society. This is not only the case for the Thai data. The World Bank's US\$1 per day poverty line (US\$365 per year) is only 43 per cent of the 1999 one-half of global median income line (US\$845), and even the US\$2 per day line (US\$730) is still well below one-half the median income (Wade 2004, 570). [INSERT FIGURE 3 HERE]

In short, there are good reasons to think that the evaluation of requirements for a life without shame in the society around one are deeply and centrally conditioned by the general growth of societal income and its distribution, which determine the ways of life and livelihood that will be seen as possible or desirable. Any attempt to skirt this issue by asserting the self-interestedness and inferiority of popular perceptions of poverty as compared to the judgments of professional economists or state officials is not persuasive, given that the poverty line judgments of such professionals and bureaucrats are themselves necessarily politicized and, very likely, far from free of self-interest (Wade 2004). The decision to separate measurement of poverty from measurement of income distribution is itself politicized, and the attempt to portray the resulting poverty measures as politically neutral or uncontroversial is disingenuous, since political judgments enter directly into the decisions about what to take as adequate minimum levels of consumption. Moreover, since one cannot really escape the social-historical—and, as I will argue below, geographical—relativity of these adequate minimum levels, the

presentation of conventional poverty lines *as if* they were truly separable from issues of income distribution is misleading and generates poverty measures that fail to meet the requirements of S1, S2, and S3.

This having been said, I do *not* argue that taking one-half the mean or median income as the measure of income poverty is inherently superior to Sen's approach. While poverty lines drawn by using one-half the mean or the median are operationally far simpler than less "relativistic" approaches, and while they do have the virtue of foregrounding the inevitable relativity and distributional sensitivity of certain aspects of absolute poverty, they are in other ways no less vulnerable to the problems for income poverty measurement created by the spatial heterogeneity of neoliberal globalization, as I will now show.

Neo-liberal Globalization and the Concept of Poverty

Poor in Relation to Whom?

If poverty is seen as inherently a concept that requires attention to the contexts in which people assess whether or not they can participate without shame in the society around them, then we have to factor into the assessment of poverty the ways in which neoliberal globalization transforms the societies of which people are a part, rather than simply using static and narrowly national measures. This means, among other things, that the groups and social characteristics against which people measure their own adequacy or poverty are likely to change because of the social transformations wrought by neoliberal globalization. This is so because the "space-time compression" (Harvey 1989) that is part of neoliberal globalization brings the lives of people with greater

income and wealth much closer to those of the poor in numerous ways. The development of more effective transportation networks makes it possible for the rural poor to more directly experience the wealth of national and transnational residents in major national urban centers; and even with serious obstacles to overseas travel, increasing migration of poorer populations for "overseas" employment in the era of neoliberal globalization has also made it possible for larger numbers of the global poor to have direct experience of the wealth enjoyed in other parts of the world, as well as for the relatives of those who travel to experience this wealth indirectly, through the stories of return migrants.

Equally importantly, the spread of telecommunications infrastructure may well contribute to the more rapid dispersion of consumerist ideals associated with the globally privileged, even granted that this telecommunications infrastructure is developed in highly uneven fashion (UNDP 2001). Indeed—and paradoxically for neoliberalism—it seems that it is precisely in those places that are most directly engulfed by neoliberal globalization that exposure to transnationalized consumption ideals purveyed by popular media may produce in many people a more acute sense of the differences between their living standards and those of the globally more privileged. In consequence, if we take seriously both globalization processes and the intrinsic relativity of poverty measures, we must consider that in creating a more globalized world in which national social structures and ideals unevenly interpenetrate one another, neoliberal globalization makes comparison with the globally more privileged a relevant basis of poverty assessment.

Here it is important to highlight one specific feature of the changing patterns of global income distribution that mark the neoliberal era. As noted above, Bourginon and Morrisson's study identifies dramatic growth in world income disparity between 1820

and 1950, while their study and others have found more modest changes from 1950 to the present. As noted above, however, there has been an important transformation in the specific dynamics driving global disparity since the 1970s. Between 1820 and 1950, virtually all of the growth in world income inequality was accounted for by changes in the average incomes of groups of countries, while between 1910 and 1950, the amount of disparity *within* country groups declined, as income came to be more evenly distributed in Europe and the countries of European settlement. By contrast, between 1980 and the present, and especially in the 1990s, growth of disparities within countries increased much more rapidly and disparities between the average incomes of countries stagnated or declined, overwhelmingly because of the growth of China (Ward and Dikhanov 2003; Milanovic 2007; 2010).

Glenn Firebaugh calls this the "new geography of global income inequality" and argues that international, between-country disparities are now in decline because of expanding industrialization, while internal disparities are becoming relatively more important (Firebaugh 2003). Firebaugh oversells the notion of a global industrialization-driven transformation. As Branko Milanovic notes, virtually all of the change in between-country disparity owes to the rapid industrialization and economic growth of China, with a small amount owing to growth in India. Between countries of the Global North and most of the rest of the Global South income gaps remain large. Nonetheless, Milanovic accepts that the dynamics of global inequality have shifted slightly. In particular, while China is slowly "catching up" with countries like the United States—even though Chinese manufacturing wages as of 2004 were less than 5 percent of the US level (Li 2008, 108)—China continues to contribute to global income inequality through the rapid

growth of disparities within China itself (Milanovic 2007, 2010; cf., Wu and Perloff 2004; Li 2008, 88-89; Chen et al. 2010). Indeed, as Milanovic shows, it is largely because they ignore the tremendous growth in disparities within countries like China that some of the studies noted above have found declining world income inequality in the neoliberal era. The more accurate picture is of a world still marked by enormous "core-periphery" differences between countries, but also marked by the growth of increasingly significant islands of extreme wealth within the global periphery and islands of severe poverty within the global core (Milanovic 2007; 2010). In short, national economic space—always more heterogeneous and fragmentary than in its idealized representations—has become yet more mottled in the era of neoliberal globalization. For the poor in countries like Thailand or China, wealth is not distant—it lives right next door.

What do the Poor Say?

A useful way to highlight the impacts of this increasing heterogeneity of economic space, as well as to make clear the structural elements of poverty necessary for meeting the requirements of S3, is to note some of the conceptions of poverty that emerge from the World Bank's own PPAs (Narayan 1999; Narayan et al. 2000). First, it is clear from any number of the statements reported in the summaries of these PPAs that poor people do indeed consider their poverty in relative terms. This is scarcely surprising, since the notion of what it is to be poor is an inherently relative one, and words meaning "poor" are typically juxtaposed—in virtually every language—with words meaning "rich" (in Thai, *khon jon* is juxtaposed with *khon ruay*). But reports from the PPAs

indicate that poor people in fact actively construct descriptions of their poverty in relation to the wealth of those they consider non-poor.

For example, the synthesis report for the PPA from Thailand indicates that villagers from Southern Thailand divide people conceptually into five categories—very rich, rich, average, poor (but liveable), and very poor. Among the various relative characteristics ascribed to these groups are the notions that the very rich and the rich "live comfortably" while the very poor "live with hardship and have to struggle" and that the very rich and rich are able to provide loans while the poor and very poor incur debt (Srawooth 1999, 10-11). Equally tellingly, the participants in the PPA described the rich as able to "eat better than us" (Srawooth 1999, 10). Similarly, participants in the Vietnam PPA defined poor households partly in terms of the things they did not have that relatively well-off and average households are defined as possessing, such as a television or radio (Narayan 1999, 28). PPAs from Eastern Europe and Central Asia indicate extremely strong relative assessments of poverty, including bitterness towards those who are seen as having become rich at the expense of others during the transition to capitalism (Narayan 1999, 52-64).

To say that poor people construct their sense of their own poverty in relative terms is not to say that they do not have "positive" conceptions of poverty that are not entirely dependent on what is possessed by the rich. Rather, their definitions of what constitutes poverty include a variety of more relative and more absolute forms of deprivation. Among the latter are lack of land, housing, food, natural resources, physical capital, clothing, work, savings, opportunities to go to school, and opportunities to donate to charities (Mukherjee 1999, 25-26; Narayan 1999, 28; Srawooth 1999, 11-15). In

addition, as is now noted in a wide variety of studies, PPAs reveal that poor people conceive their situations of poverty in multi-dimensional and broadly social terms, not merely in terms of incomes or the material goods incomes can purchase (Narayan 1999; Narayan et al. 2000; Rojas 2004). These results indicate that the challenges of addressing poverty include dealing with both inadequate incomes *and* broader social-structural problems, dealing with more absolute forms of material deprivation *and* more relative forms of deprivation generated by income inequality.

These challenges would be considerable under the best of circumstances. I argue, however, that neoliberal globalization is creating circumstances that are very far from being the best for dealing with these complex challenges. To see this, it is worth looking a little further at some of the items that differentiate the poor and the non-poor in the PPAs. Particularly striking in this regard is the fact that two kinds of items that only a few decades ago would have been taken as marks of superfluity or decadence in much of rural Southeast Asia are today taken as necessary for a life without poverty—namely, motorized transportation (a car or motorcycle) and consumer electronics goods (television or radio). In Thailand, as noted, a motorcycle could be characterized as an emblem of profligacy in the 1950s; today male villagers regard a car as necessary to well-being (Srawooth 1999, 15). In Vietnam, a 1980s movie lamenting the loss of revolutionary idealism presented the possession of a "boom box" purchased on the black market as a mark of degeneracy; today Vietnamese regard households without a television or radio as poor (Narayan 1999, 28).

These criteria for a life without poverty indicate the degree to which "globalized" consumption norms have become (unevenly) integrated into the conceptions of poverty

held by poor people in the Global South. In some cases, the unevenness is itself the most striking feature of the criteria: the synthesis report of the Indonesian PPA characterizes rich people through a heterogeneous mixture of material assets that range from the most representative of globalized modernity (automobiles and color televisions) to some that seem to represent a far different and more localized sense of prosperity (kerosene pressure lanterns) (Mukherjee 1999, 23).

Since televisions and radios are not only central consumption items in these conceptions of well-being but are also crucial purveyors of the sense of what constitutes material adequacy, it is also worth reflecting on the implications of this spread of information technology for notions of poverty. To take but one of many examples, Mary Beth Mills' ethnographic study of young women from Northeast Thailand who migrate to Bangkok for work in the city notes that these women carry with them a strongly cultivated sense of the desire to be "modern" (*thamsammay*), which involves consuming in ways that they associate—in part through the spread of telecommunications, in part through the stories of other migrants—with national and international standards (Mills 1999). This means that even within some of the poorest rural communities in Thailand consumption norms that are derived in part from the ability of Bangkok-based populations to participate directly in globalization are taken as requirements for material well-being alongside of requirements for basic forms of provisioning that the poorest lack.

This heterogeneous economic landscape makes determination of what constitutes adequate income for satisfaction of non-food consumption needs practically impossible.

The World Bank's 1993 US\$1.08 per day poverty line, and even its recently updated

2005 US\$1.25 per day poverty line, quite simply ignore this problem—as these lines fundamentally ignore most other implications of the World Bank's own PPAs—and stand in stark contrast to the obviously much higher income requirements that the poor would claim in articulating what is necessary to satisfy their material needs. Nor is it clear how the World Bank could decide precisely what kinds of non-food requirements to count as necessary, across the array of differing requirements named in the PPAs; yet to ignore these stated requirements would be precisely to construct an arbitrary income standard based only on the preferences of the economists rather than on broadly popular conceptions of what constitutes poverty.

Notably, the problems in this regard do not only afflict the more absolute conception of income poverty favored by the World Bank. If one takes one-half the mean or median income as the poverty line, the heterogeneity of economic landscapes creates equally vexing problems. Ultimately, the problem that must be confronted on either approach is that of determining the appropriate reference group for defining absence of well-being. In the more openly relativistic approach, the problem is resolved methodologically by taking the national society and its income distribution as the reference group. Yet in a heterogeneous economic landscape this is by no means clearly adequate. Consider what happens to the poverty lines for Thailand if one takes not one-half the *national* mean or median but rather one-half the mean or median of the local, sub-national community as the reference. As Figure 4 illustrates, this results in very different poverty lines and trends than what is obtained using national income distribution as the reference. Moreover, defining poverty in relation to sub-national reference groups, as the Thai government has decided to do since the late 1990s (World Bank 2001, 2)

leads to very different characterizations of who the poor are—specifically, resulting in more poverty within major cities and less in rural areas. On the other hand, if one-half the *global* mean or median were taken to be the reference, the poverty profile would be different yet, centered almost exclusively in rural areas.

Heterogeneity of economic landscapes under neoliberal globalization means that there is no inherently "correct" answer as to which of these reference groups to use. We inhabit a world where villagers may simultaneously take lack of land, lack of cash, lack of a kerosene lamp, and lack of a car as indicators of poverty. Certainly, it can't be long until, in many parts of the world, lack of a telephone and internet access might also be taken as a sign of poverty, right alongside lack of food.

Conclusion: Implications for Studies of Poverty

I choose to call the result for which I have argued here a "Heisenberg Uncertainty Principle of Poverty," since like the actual Heisenberg uncertainty principle the inability to meaningfully operationalize a serious conception of income poverty is a function of the fact that human interventions into the phenomena being measured—i.e., attempts to raise income levels and reduce poverty through promoting neoliberal globalization—themselves help to generate the indeterminacy of measurements. When confronted with this uncertainty principle, I would claim, the reasonable response is to stop attempting to measure income poverty.

The World Bank is fond of arguing that despite the difficulties in effectively operationalizing a coherent measure of income poverty, measurement is necessary as a guide to policy (Ravallion 2003; 2010a). This argument does not make sense, however.

If a coherent conception of poverty that meets the requirements of S1, S2, and S3 simply cannot be effectively operationalized because of the characteristics of the economy under neoliberal globalization, then it is useless to pretend that a conception of poverty like the US\$1, US\$1.08 or US\$1.25 per day measure provides a reasonable guide to policy. Moreover, if the goal is really to improve material well-being, the World Bank does not need such an income poverty measure. If the goals of policy are indeed to reduce forms of material deprivation such as lack of food, the World Bank and other such organizations can far more adequately address these basic needs issues through directly assessing food needs of particular groups and promoting appropriate policies, without inaccurately advertising this as an exercise in poverty reduction. Moreover, approaching food needs in this way does not beg the question from the outset by ingraining the spurious contention that what is needed first and foremost is to increase incomes as the means of enabling more food consumption. This keeps on the table issues such as land reform, state nutritional programs, and other potential "non-market" social responses to food poverty—that is, it does not preclude the possibility of addressing basic needs through simultaneously dealing with poverty in ways that address requirement S3. Similarly, if the World Bank wishes to address non-food needs such as health care or the need for specific non-food consumption goods, it would do better to assess these directly including through its own PPAs—rather than through the indirect approach of trying to determine income poverty lines. Finally, even if the goals of policy are in fact to increase incomes or redistribute wealth—arguably a necessity for a poverty reduction approach that attends to S3—these are goals that can be directly approached without attempting to determine a poverty line.

Far from being necessary to effective policy, official poverty lines such as the current US\$1.25 per day line are far more likely to serve the World Bank as rhetorical or even propaganda—tools for selling itself and dismissing criticisms of the failures of its pro-neoliberal policies (Parsons 2012). On the other hand, attempts to challenge the neoliberal policies promoted by the World Bank and other organizations do not necessarily benefit from utilizing the same dubious language of income poverty favored by the World Bank. Human beings do quite well at articulating complex, heterogeneous, and robust conceptions of poverty that reflect their complex, multi-dimensional experiences of absolute and relative deprivation—even without having to define income levels that completely capture their experiences. Those who wish to challenge neoliberal globalization, or global capitalism more generally, have plenty of evidence of the injustices of capitalism from both the statements about poverty made by the heterogeneous groups of people who experience it and the statistical evidence on the kinds of global income disparities that have evolved over the last two hundred years. Trying to force this evidence into the straightjacket of a global income poverty line is entirely unnecessary. It is perfectly plausible that in a capitalist world the poor will always be with us, even if a useful measure of global income poverty isn't.

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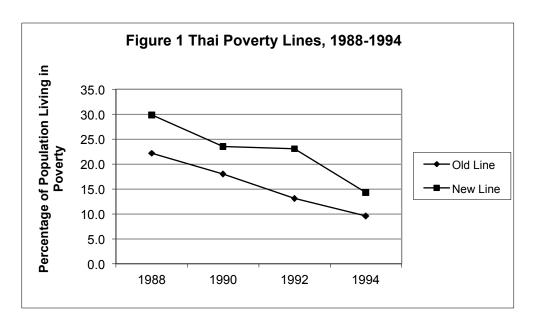
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Table 1 Results of Arom Pongphangan Survey of Samut Prakan and Nakon Pathom Workers'

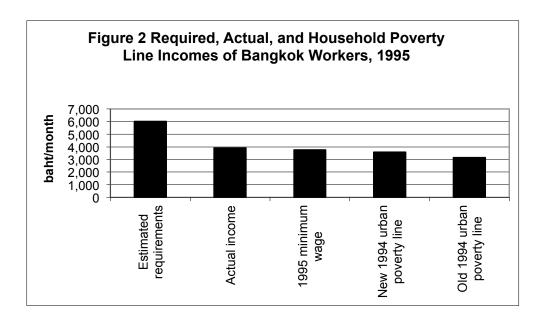
<u>Expenses, October and December 1995</u>

<u>Item</u>	Thai Baht	US dollars	Selected Prices	Selected prices
	per month	per month	before crisis	after crisis
Food	2,508	100.32	Plate of pad	Plate of pad
			thai and coke =	thai and coke =
			B 25	B 40
Clothing	334	13.36	T-shirt =	T-shirt =
			B 100;	В 200;
			Pair of jeans =	Pair of jeans =
			B 200	В 300
Housing	784	31.36		
Travel	316	12.64	Round-trip bus	Round-trip bus
			fare = $B 5$;	fare = $B7$;
			Liter of gas =	Liter of gas =
			В 7	B 14
Entertain-	789	31.56	Cassette tape =	Cassette tape =
ment			B 65	B 75
Personal	459	18.36	Toothpaste =	Toothpaste =
expenses			B 25;	В 32;
			Bar of soap =	Bar of soap =
			B 7	B 10
Religious	302	12.08		
and social				
Total	6,019	240.76	Low income	Low income
expenses			consumer price	consumer price
			index, 1995 =	index, 1999 =
			106.6	131.9
Monthly	3,915	156.60	1995 Labor	1999 <i>Labor</i>
wages			Force Survey =	Force Survey =
			B 4,641	B 6,410
Borrowed	260	10.40	Interest rate =	Interest rate =
			5-10	10-20
			percent/mo.	percent/mo.

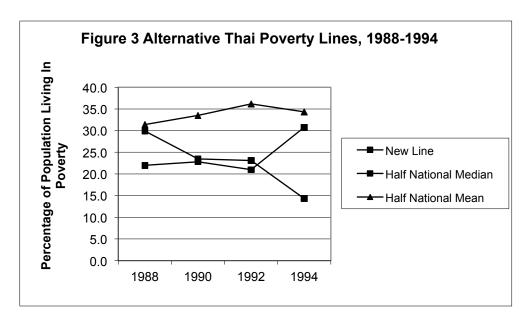
Source: Bangkok Post, 14 July 1996



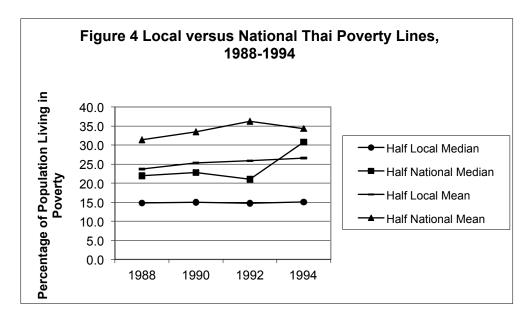
Sources: Medhi 1996; Kakwani and Medhi 1996



Sources: Bangkok Post 14 July 1996; Medhi 1996; Kakwani and Medhi 1996



Sources: calculated from NSO 1988-1994



Sources: calculated from NSO 1988-1994