

The World's Largest Open Access Agricultural & Applied Economics Digital Library

## This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<a href="http://ageconsearch.umn.edu">http://ageconsearch.umn.edu</a>
aesearch@umn.edu

Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.

### GLOBAL DEVELOPMENT AND ENVIRONMENT INSTITUTE WORKING PAPER NO. 07-02

# Declining Poverty in Latin America? A Critical Analysis of New Estimates by International Institutions

Ann Helwege and Melissa B.L. Birch

September 2007

Tufts University
Medford MA 02155, USA
<a href="http://ase.tufts.edu/gdae">http://ase.tufts.edu/gdae</a>

## Declining Poverty in Latin America? A Critical Analysis of New Estimates by International Institutions

#### Ann Helwege and Melissa B.L. Birch

#### **Abstract**

Indicators of progress in overcoming poverty in Latin America have been heralded recently by international institutions. Yet a closer look at data from the World Bank and the United Nations reveals contradictions that are not easily resolved by reference to the underlying methodologies. This paper provides an introduction to how poverty is measured, what the data indicate about trends in poverty, and reasons to tread cautiously in interpreting it as evidence of progress or stagnation. While significant progress has been achieved in a few large countries, the poorest countries are still very poor, and some countries have even seen increases in their poverty rates despite economic growth.

#### **Executive Summary**

Recent data from the World Bank and the United Nations suggest that poverty in Latin America is going down, and down significantly among the 'extremely poor.' With the renewed attention to poverty reduction created by the Millennium Development Goal to halve world poverty by 2015, the reported progress is welcome news. But how well do we understand these trends?

Lost in the statements of progress are serious discrepancies in the available data, questions about the correct methodology for measuring poverty, and overgeneralizations about regional progress. In this paper, we look behind the optimistic assessments to examine the data and the methodologies used to interpret them. What we find is an alarming number of inconsistencies in the current poverty data. These should make scholars and policymakers pause before drawing conclusions about the quality of life experienced by Latin America's poorest citizens.

#### Widely Varied Measures

Poverty data is collected and analyzed by national governments and international agencies. Most rely on the same set of household surveys, done periodically in most developing countries. The two most important international poverty measures come from the World Bank, with its World Development Indicators (WDI), and the United Nations, from its Economic Commission for Latin America and the Caribbean (ECLAC, or

CEPAL, to use its Spanish acronym). The two agencies analyze the same data quite differently. A third research organization, CEDLAS, offers its own interpretation of this data in collaboration with a different branch of the World Bank, its LAC Poverty Group.

The World Bank's data are perhaps the most widely cited for international comparisons. They are based on poverty lines of \$1/day for extreme poverty and \$2/day for moderate poverty. For Latin America as a whole, the World Bank suggests that moderate poverty has fallen from 26% in 1990 to 22% in 2004, while extreme poverty fell from 10% to 9% in the same period (World Bank 2007).

CEPAL has developed country-specific poverty lines based on the estimated costs of a basic food basket. These are intended to capture the widely varying costs of living among the poor in different parts of the region. CEPAL's poverty rates are generally higher than the World Bank's but also tend to show greater improvement. According to CEPAL, moderate poverty in the region fell from 48% in 1990 to 40% in 2005, while extreme poverty dropped from 23% to 15% (Economic Commission for Latin America and the Caribbean 2007).

Different methodologies naturally generate different numbers. But they also define the problem we refer to as 'poverty,' which implicitly calls for a policy response. Do we consider the extent of poverty 40%, as CEPAL states, or 22%, as the World Bank argues? Clearly, discrepancies of such magnitudes matter for policy formulation. And while both agencies document declines in both moderate and extreme poverty over time, the extent of decline is quite different, raising doubts about claims of progress achieved under particular policy regimes.

Unless the distribution of income deteriorates, poverty ought to decline with economic growth. Reasoned debate about progress should focus on the pace of decline. Unfortunately, the erratic nature of the data precludes any such analysis, and even the direction of trend is in doubt in some cases. While we offer tentative interpretations of recent data, a central message of this paper is that meaningful work on poverty requires cautious use of these data.

#### **No Shared Trends Across the Region**

Are most individual Latin American countries experiencing similar reductions in poverty rates? Not surprisingly, there is great variation from one country to the next, and regional trends are dominated by the two largest countries, Mexico and Brazil. In fact, a closer examination suggests that generalizations about Latin American poverty reduction are driven largely by improvements in Mexico, at least as they are measured by international institutions.

A closer look at the country-level poverty trends suggests the following tentative conclusions:

- Mexico Data from the World Bank's PovcalNet suggest that from 1990-2004 moderate poverty went down from 24% to 12%, and extreme poverty dropped from 6% to 2%. Did Mexico more than halve poverty levels since 1990? CEPAL data show both higher poverty levels and less dramatic reductions since 1989: from 48% to 37% for moderate poverty and from 19% to 12% for extreme poverty. These data are the subject of some controversy in Mexico, both because of doubts about the empirical evidence and normative reactions to the pace of progress in the context of an oil boom. Still, in a world driven by World Bank and CEPAL poverty estimates, the poverty cuts are large and drive the regional data, as such a large portion of the region's poor reside in Mexico.
- **Brazil** The other large economy that drives regional averages has also shown progress in reducing poverty since 1990. Moderate poverty fell between 1990 and 2004 from 32% to 20% (WB), or from 48% to 38% (CEPAL). During that same time period, extreme poverty fell from 14% to 8% (WB), or from 23% to 12% (CEPAL). However, according to both sources, much of this progress occurred before 1996, with little taking place since then.
- Everyone else Take the two largest economies which have both shown progress according these sources out of the regional picture, and things look much worse for Latin America. Using the World Bank's data, moderate poverty increased from 21% to 27% and extreme poverty rose from 7% to 11%.
- Worst are in the middle Four of the region's more developed countries Argentina, Colombia, Peru, and Venezuela have shown the worst performance. As a group, they've seen moderate poverty balloon from 11% to 25%, while extreme poverty jumped from 2% to 10% (WB). In all four cases, the data are incomplete and sometimes inconsistent, but the extent of problems in these relatively large countries raises doubts about prospects for halving poverty by 2015.
- Small countries with signs of progress Chile, Costa Rica, Dominican Republic, El Salvador, Guatemala, and Panama have reduced poverty according to international data sources, and in some cases, the improvement is dramatic. As a group, these countries saw moderate poverty drop from 30% to 19% and extreme poverty from 13% to 7% (WB). Unfortunately, together they account for only 9.5% of the region's population.
- **Poorest countries struggle** Among the region's poorest countries Bolivia, Ecuador, Haiti, Honduras, Nicaragua, and Paraguay there has been varied success in reducing poverty. As a group, moderate and extreme poverty each fell by only 1%, from 49% to 48% and from 26% to 25%, respectively (WB). While there is evidence that some of these poor countries have seen notable

improvements, it tends to falter when cross-checked against other estimates. For example, the near halving of poverty in Honduras reported by the World Bank is inconsistent with the very slow progress reported by CEPAL. Bolivia, Ecuador, and Paraguay all seem to have experienced rising poverty, based on the limited data available.

#### **Conclusions**

Generalizations about declining poverty in Latin America are misleading. The data on which such claims are made do not agree with one another on the extent of poverty or about the pace of progress. Regional averages are driven largely by measured progress in its largest economies, but these averages mask wide variation among countries. Significant progress has been concentrated in a few countries, the poorest countries are still very poor, and some countries have even seen increases in their poverty rates despite economic growth.

Policy analysts may reasonably differ in their opinions about an acceptable pace of progress in reducing poverty, but inconsistent data only distract us from finding solutions that improve people's lives. If we are to replicate successes and rectify policy errors, we need more reliable measures of progress. The international community that established the Millennium Development Goals would create a stronger basis for assessing their achievement by creating common, transparent approaches to data collection.

"Over the last twenty-five years, following the prescriptions of international organizations, the governments of Latin American countries have implemented economic and social policies based in 'free market' principles, amounting to a 'race to the bottom' strategy. As a result, poverty has grown and labor and social policy standards have been gradually reduced to the minimum ..." Damián and Boltvinik 2006

"The last four-year period (2003–2006) has thus seen Latin America's best performance, in terms of social indicators, for 25 years. For the first time the poverty rate has come below the figure for 1980, when 40.5% of the population was classified as poor, while the indigence rate is now more than three percentage points below the 18.6% figure for that year. Moreover, the new figures show a reduction for the third consecutive year in the absolute numbers of poor and indigent, which is unprecedented in the region."

United Nations/CEPAL, Social Panorama of Latin America 2006

Latin America is a relatively rich region. Its per capita GDP of \$4044 is three times that of East Asia, and seven times that of South Asia and Sub-Saharan Africa. Data showing that 120 million (out of 550 million) Latin Americans live on less than \$2 per day, and 47 million live on less than \$1 per day rightly appalls even many rich Latin Americans. But are these numbers accurate? There is little agreement about the extent of poverty, much less about how to solve it.

Data on poverty has taken on greater significance since 2001, when the United Nations, the World Bank, and the IDB joined national governments in setting the Millennium Development Goals.<sup>2</sup> Key to these MDGs is a commitment to reduce the 1990 poverty rate by half before 2015.

With so much attention devoted to poverty reduction, one would think it easy to find information about trends in poverty. Instead, any foray into this field is bound to reveal contradictory data and controversial interpretations of the same data. The two quotes cited above reflect how easily interpretations are driven by an author's choice of time frames. Yet even for the same year, estimates of poverty differ markedly. The United Nations, for example, estimated that 17% of Latin Americans lived in extreme poverty in 2004, while the World Bank estimated that 9% did. Policy advocates and scholars have understandably questioned whether the data provide a reliable reflection of reality.

For users baffled by inconsistencies in this data, and for those unaware of its contradictions, this paper provides an introduction to how poverty is measured, what the data indicate about trends in poverty, and reasons to tread cautiously in interpreting it as evidence of progress or stagnation. The first section frames questions that can be

<sup>2</sup> ECLAC (2005) <u>The Millennium Development Goals: A Latin American Perspective</u>. Santiago, Chile, ECLAC.

<sup>&</sup>lt;sup>1</sup> World Bank (2007) World Development Indicators Online (WDI Online), World Bank.

<sup>&</sup>lt;sup>3</sup> ECLAC (2007) Social Indicators and Statistics Database (BADEINSO); ECLAC; S. Chen and M. Ravallion (2007) PovcalNet, World Bank; World Bank (2007), WDI Online.

addressed by these data, and distinguishes between issues of evidence and interpretation. An important concern is that common definitions of poverty are too narrow and fail to direct policies toward the multiple dimensions of hardship experienced by the poor.

The second section describes how poverty is defined and measured by three major international sources. Some contradictions in poverty data reflect methodological choices that can be clarified with a careful reading of source notes. Beyond these explanations, though, lie many unresolved discrepancies. Ironically, the institutions that generate poverty data are well aware of how methodological choices affect poverty estimates. They simply have not established standardized approaches to measuring poverty.

The third section turns to the data itself. For the two largest countries, Mexico and Brazil, it seems possible to make sense of overall trends. International estimates indicate that Mexico has reduced poverty in the past two decades, perhaps thanks to oil revenue, while Brazil's progress has been considerably slower. Several small countries can also claim unambiguous gains. In three large countries, Argentina, Peru and Venezuela, poverty has risen over the past decade and a half, but whether it has tripled or merely increased by 10% differs by data source. For Colombia, the region's third largest country, the data sources do not even agree about the direction of trend. In several other cases, the evidence is also too erratic to support any conclusions about trends.

Of course, even where we can find consistent data, interpretations cannot escape normative debate. Poverty ought to decline with growth. Unless inequality rises sharply, a higher GDP per capita should pull more people over a fixed poverty line. Thus it is troubling that users will find it difficult to figure out *whether* poverty has fallen, and not by how much, in several countries. To move forward in policy development, we need a better understanding of actual trends.

#### I. What Do We Mean by Poverty?

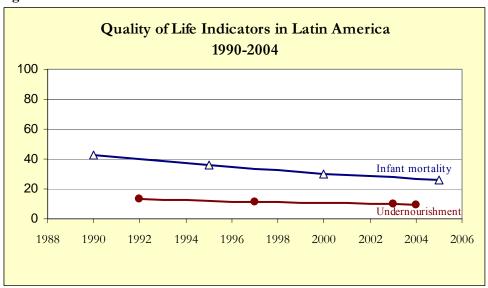
A short visit to poor communities in Latin America reveals a striking vulnerability to health crises, earthquakes, hurricanes, violent crime, unemployment and agricultural droughts. Ideally, we want to measure the extent to which this vulnerability is declining, whether through access to hurricane shelters or the employment of nurses in rural health clinics. Traditional measures of poverty focus more narrowly on household income or expenditure, with modest adjustments. Certainly higher incomes reduce such vulnerability, but much progress can be achieved without changing the financial status of the poor, and conversely, improvements in the incomes of the poor will not always resolve problems of vulnerability.<sup>4</sup>

\_

<sup>&</sup>lt;sup>4</sup> More needs to be done to understand how our measures of poverty affect policy choices. Excessive focus on financial income can divert attention – and perhaps fiscal expenditures– from policies to improve lives in other respects. In fact, one concern is that the 'success' of cash transfers in reducing measured poverty undermines support for the provision of public services.

Poverty measurement can be categorized by the degree to which it includes aspects of well-being among the poor. Income poverty, typically measured against a poverty line, indirectly reflects access to goods and services that can affect well-being. Basic quality of life indicators are considered "direct" measures. Throughout Latin America, indicators such as infant mortality, malnutrition and illiteracy have improved markedly in nearly every country over the past two decades (see Figure 1). On this point, there is little controversy, although there is debate about whether progress has been fast enough. 6

Figure 1



The broadest conceptualization of poverty includes such aspects as relative deprivation, political freedoms, gender equity and environmental sustainability, some of which are encompassed in Sen's ideas of capabilities and substantive freedoms. This conceptualization is the most difficult to measure, due to its complex and often context-dependent nature. It also raises important questions about agency among the poor — that

\_

<sup>&</sup>lt;sup>5</sup> Individual indicators have long been used by national and international institutions to monitor progress on specific aspects of wellbeing. More recently, composite indicators have been developed to measure poverty in a more comprehensive way. One well-known such indicator is the UNDP's Human Poverty Index (available at http://hdr.undp.org/hdr2006/statistics/indicators/18.html). Others include the NBI (Necesidades Básicas Insatisfechas), a version of which covers urban areas in Latin America and is available from CEDLAS, as well as the MMIP (Medición Integrada de la Pobreza), covering Mexico only.

See CEDLAS and the World Bank's LAC Poverty Group (LCSPP) and MECOVI Program (2006) Socio-Economic Database for Latin America and the Caribbean (SEDLAC); Boltvinik, J. (2003) "Tipología de los métodos de medición de la pobreza. Los métodos combinados." <u>Comercio Exterior</u> **53**(5): 453-465.

<sup>&</sup>lt;sup>6</sup> See A. Fiszbein, ed. (2005), <u>Citizens, Politicians and Providers: The Latin American Experience with Service Delivery Reform, World Bank.</u>

<sup>&</sup>lt;sup>7</sup> Indicators for this broadest conceptualization of poverty and development tend not to be aggregated into composite indicators of "poverty." A few (among many) examples of relevant indicators include the Gender Empowerment Measure (<a href="http://hdr.undp.org/hdr2006/statistics/indicators/">http://hdr.undp.org/hdr2006/statistics/indicators/</a>) and the various indicators in the UNDP's <a href="Democracy in Latin America">Democracy in Latin America</a>: <a href="Towards a Citizens">Towards a Citizens</a>' <a href="Democracy perticularly">Democracy</a>, particularly the

is, apart from the hardship of surviving on too little food, in cramped quarters, with grueling workhours, do the poor get a voice in the meta-system that condemns them to poverty?

The focus of this paper is on quantitative measures of absolute poverty. Absolute poverty refers to the ability to consume a minimal bundle of goods. The emphasis is on measures of consumption or income, and the ability to afford a fixed standard of living. While the choice of such a bundle is obviously driven by cultural standards, it is a different concept than relative poverty, which measures income distribution. We focus on income- or consumption-based measures because, despite their limitations, such measures are pervasively used in the assessment of success in anti-poverty programs and of progress in general.

The choice of a poverty line is frequently controversial. Multilateral institutions have settled into a common range of roughly \$2 per day for moderate poverty and \$1 per day for extreme poverty. Damián and Boltvinik ask whether the UN's definition of extreme poverty, the cost of a basic food basket, adequately reflects the resources needed to sustain even the crudest human existence:

To purchase the Normative Food Basket (NFB), households with income equal to the extreme poverty line (EPL) would have to spend 100 percent of their earnings on raw food, but they would find it impossible to consume it since the NFB does not include the requirements for its preparation and consumption (gas, pans, utensils, plates, a table, detergents, etc.). This definition of extreme poverty reduces human beings to an animal state, eating raw food on the floor with their hands.

To complicate matters, even the poorest Latin Americans do not necessarily devote their resources to food. In "Economic Lives of the Poor," Banerjee and Duflo suggest that the poor spend considerable money on – and presumably value highly – religious festivals, televisions, alcohol and tobacco, even when they cannot afford enough

socio-economic breakdowns in Second Part of the Statistical Compendium. Various empowerment indicators for specific ethnic groups can be found in the Minorities at Risk database (http://www.cidem.umd.edu/mar/).

<sup>&</sup>lt;sup>8</sup> The relative poverty line is usually defined as the percent of the population that receives less than half the median income in a country. SEDLAC data indicates that 26% of Argentines fell below this relative poverty line in 2004, while only 22% of Guatemalans were 'relatively poor.' Yet a far greater proportion of Guatemalans lacked adequate housing, food and health care. Because the median income in Argentina is higher than in Guatemala, the relative poverty line is, as well. Even within countries, the concept of relative poverty can be misleading for trend analyses, since median income changes over time. Chen and Ravallion (2001) create a hybrid concept of 'relative poverty' which excludes individuals with income above \$1 a day and one third the mean national income.

<sup>&</sup>lt;sup>9</sup> A. Damián and J. Boltvinik, "A Table to Eat on," in E. Hershberg and F. Rosen, <u>Latin America after Neoliberalism</u>, New Press, 2006.

to eat. Patterns of such expenditures vary widely among people living on less than \$1 a day in Latin America. 10

New, higher poverty lines are beginning to displace the \$1 and \$2 per day measures used here. For example, the media reports that half of Mexicans reportedly live on less than \$4 per day. While this higher standard makes sense from a normative perspective, shifting standards makes it more difficult to assess the pace of progress against poverty. Since a substantial portion of Latin Americans still cannot afford a basic food basket, much less twice that, the existing poverty lines are not yet irrelevant.

Given this construction of 'poverty' as the inability to afford a minimal bundle of goods, what can we expect to learn from the data? Users might reasonably hope to find:

1) information on whether poverty has been declining, and if so, how fast; 2) whether some countries experience higher rates of poverty than other countries at comparable levels of GDP per capita; and 3) whether trends in some countries warrant a closer examination of policies that can be replicated (or avoided) elsewhere.

What the basic data will not reveal, even at its best, is whether the same families are trapped in poverty (chronic vs. temporary poverty); how far the income of poor families falls short of the poverty line (the poverty gap); and whether some groups (e.g., indigenous people) suffer disproportionately from poverty. Nor will the data provide guidance in setting normative benchmarks for evaluating the pace of progress.

#### **II. Measures of Absolute Poverty**

In addition to work done by individual countries, there are three major sources of data on poverty in Latin America. The World Bank provides data in its World Development Indicators (WDI), as well as in an online software tool called PovcalNet, which uses the same underlying data as the WDI. The United Nations' CEPAL tracks poverty in its BADEINSO database. An Argentine research institute, CEDLAS, compiles its own estimates in its SEDLAC database. Conceptually, all follow a

<sup>&</sup>lt;sup>10</sup> Banerjee, A., and E. Duflo, "The Economic Lives of the Poor," <u>Journal of Economic Perspectives</u>, **21**(1): 141-167, Winter 2007. To our knowledge, the metrics of poverty have not been tested to see how well they measure what the poor seek most urgently.

<sup>&</sup>lt;sup>11</sup> "Cost of Corn Soars, Forcing Mexico to Set Price Limits," New York Times, 1/19/07, p. A12

<sup>&</sup>lt;sup>12</sup> PovcalNet's calculations are based on the same underlying data and calculation methodologies as the World Development Indicators. However, estimates sometimes vary slightly as WDI uses individual household records, while PovcalNet uses grouped distributions.

<sup>&</sup>lt;sup>13</sup> Acronyms: BADEINSO — Base de Estadísticas e Indicadores Sociales; CEDLAS- Centro de Estudios Distributivos Laborales y Sociales; CEPAL — Comisión Económica para América Latina y el Caribe (also, Economic Commission for Latin America and the Caribbean, ECLAC); SEDLAC— Socio-Economic Database for Latin America and the Caribbean; WDI— World Development Indicators.

<sup>&</sup>lt;sup>14</sup> CEDLAS works in collaboration with the World Bank's LAC Poverty Group.

common approach in defining poverty and use similar lines of absolute poverty. In addition, they all rely on the household surveys carried out by national statistical agencies.

In this section, we will examine similarities and differences among these three sets of estimates, as well as some of the controversies associated with them, with a focus on the poverty line chosen, the methodology used in calculating the poverty estimates, and the household surveys on which they are based.

#### **II.A. Poverty Line Selection**

The World Bank and CEPAL each set two poverty lines, the higher of which is referred to as moderate poverty, or simply poverty, and a lower line that defines extreme poverty, or indigence. The World Bank sets poverty lines that are common across all countries: the poverty line is set at \$2.15 per day and the indigence line at \$1.08 per day. In contrast, CEPAL has developed country-specific poverty lines. Its extreme poverty line reflects the income necessary to buy a minimally nutritious basket of food, as defined by World Health Organization standards and local dietary customs. CEPAL's moderate poverty line is set at twice this indigence line for urban areas and 1.75 times the indigence line for rural areas. CEDLAS calculates poverty rates for several different poverty lines, including \$2.15 and \$1.08 per day.

The World Bank's approach has been credited with consistency across countries, particularly since the dollar-a-day standard is adjusted for exchange rate biases using purchasing power parity (PPP) indexes. CEPAL takes issue with this, arguing that its own approach better reflects the bundle of goods actually consumed by the poor. Because patterns of consumption vary across countries, CEPAL argues, so does the cost of living.<sup>17</sup>

How different are the measures? In fact, the two lines are not very different except in a few countries, notably Bolivia, Brazil and Nicaragua on the low end, and Mexico and Venezuela on the high end. Table 1 shows the CEPAL poverty line for several Latin American countries.

The significance of these differences depends on how many people live just above or below the poverty line. Wade argues that the World Bank's poverty rates are very sensitive even to small differences in the poverty line. 18 Even where CEPAL and the

These numbers originally started out at an even \$2 and \$1 per day, but purchasing power adjustments have since been made.

<sup>&</sup>lt;sup>16</sup> Gasparini, L., F. Gutiérrez, *et al.* (2005) <u>Growth and Income Poverty in Latin America and the Caribbean: Evidence from Household Surveys.</u> La Plata, CEDLAS, Universidad Nacional de La Plata. Chen and Ravallion (2007) PovcalNet; ECLAC (2006) BADEINSO; World Bank (2007) WDI Online.

<sup>&</sup>lt;sup>17</sup> ECLAC (2006) Social Panorama of Latin America: 2006. Santiago, United Nations Publications.

<sup>&</sup>lt;sup>18</sup> Wade, R. H. (2004). "Is Globalization Reducing Poverty and Inequality?" <u>World Development</u> **32**(4): 567-589.

**Table 1 CEPAL Extreme Poverty Lines in US**\$

2000-2004, monthly, using current (IMF) exchange rates

Argentina	\$37.40	Guatemala	\$43.60		
Bolivia	\$22.60	Honduras	\$41.60		
Brazil	\$22.10	Mexico	\$70.60		
Chile	\$34.90	Nicaragua	\$27.60		
Colombia	\$34.60	Panama	\$40.70		
Costa Rica	\$39.20	Paraguay	\$41.80		
Dominican Republic	\$42.20	Peru	\$34.50		
Ecuador	\$34.60	Uruguay	\$37.30		
El Salvador	\$34.90	Venezuela	\$69.10		
Source: CEPAL 2005, p. 319					

World Bank use closely comparable poverty lines, and apparently the same household survey data, it is surprising how significantly their estimates differ. For example, according to CEPAL, 51% of Colombians lived below the moderate poverty line (roughly \$2 per day) in 2004, while World Bank and CEDLAS estimates were 18% and 26%, respectively.

#### II.B. Methodology for Handling Survey Data

Some differences in estimates reflect how the institutions handle survey data, as well as their choice of data sources (see Table 2). CEPAL and CEDLAS make adjustments for the different costs of living in rural and urban areas: CEPAL adjusts the rural poverty line downward by 15-25%, while CEDLAS scales up rural income a similar percent. The World Bank uses the same poverty line for rural and urban areas. Similarly, on the assumption that children require fewer resources than adults, CEDLAS makes 'adult equivalence' adjustments for household demographics; neither the World Bank nor CEPAL do so.

A controversial methodological issue is the treatment of non-monetary income, particularly the imputation of rent to owner-occupied housing. During housing booms, imputed rent from owner-occupied housing will rise, even though the occupants of a simple shack may lack enough money to buy food. These owners are arguably better off than renters or squatters with the same cash income, but rising imputed rent may move some households above the poverty line despite their penury.

Each source also differs in terms of how it handles missing data and resolves inconsistencies with national accounts. CEPAL assigns income to households that fail to report income ('omitted income'); it also scales the whole database to reconcile changes with macroeconomic data. Neither CEDLAS or the World Bank make such changes.

The importance of these seemingly subtle methodological differences has been systematically examined by Szekely, Lustig, Cumpa and Mejia.<sup>19</sup> Their estimates show

<sup>&</sup>lt;sup>19</sup> M. Székely, N. Lustig, M. Cumpa, J.A. Mejía (2000) "Do We Know How Much Poverty There Is?" Inter-American Development Bank Working Paper 437, Washington, D.C., December 2000.

Table 2: Summary of Methodological Differences among Databases

	SEDLAC	CEPAL	PovcalNet
Poverty line?	\$1 & \$2 per day	Based on cost of food	\$1 & \$2 per day
		basket	
Government transfers included?	Yes	Some monetary transfers are included, especially for large	Some transfers are included, depending on the country and the
		programs.	survey.
Rural/urban adjustments?	Yes	Yes	No
Adult equivalence scale?	Yes	No	No
Imputed rent from own-housing?	Yes	Usually	Usually
Adjustments for omitted income?	No	Yes	No
Adjustments based on national	No	Yes	No
accounts?			

Sources: Chen and Ravallion 2000, 2004, and 2007; Gasparini, Gutiérrez et al. 2005; ECLAC 2006; Chen 2007; Mancero 2007

that typical adjustments for nonmonetary income, adult equivalence and treatment of missing or under-reported income significantly change the level of poverty, often by a factor of three or four. Methodological differences also affect the ranking of Latin American countries by poverty rates.

Even if one cannot compare CEPAL, World Bank and CEDLAS data directly, trends in the three series should be fairly similar. For most countries, the direction of trends is generally consistent across the three sources, but the slope often differs. According to Gasparini, Gutiérrez et al. (2005), the CEDLAS estimates are most highly correlated with the CEPAL estimates (a linear correlation of 0.931), and less well correlated with the estimates from the World Development Indicators database (correlations of 0.878 and 0.745 for moderate and extreme poverty rates, respectively). Since our primary concern is about how World Bank and CEPAL data is interpreted by the public, we refer to CEDLAS data only where it indicates a different perspective. The Appendix provides data from all three sources.

#### II.C. Underlying Household Survey Data

How good are the data themselves? Do they measure what they purport to measure? Survey frequency has increased dramatically over the past twenty years, leading to less need for interpolation between surveys. In addition, survey quality and standardization has increased, in part due to the Program for the Improvement of Surveys and the Measurement of Living Conditions in Latin America and the Caribbean (MECOVI).<sup>20</sup> MECOVI has been administered by the World Bank, CEPAL, and Interamerican Development Bank, and applied in Argentina, Bolivia, Colombia, Ecuador, El Salvador, Guatemala, Honduras, Nicaragua, Paraguay, and the Dominican Republic.<sup>21</sup> Unfortunately, this standardization is far from complete.

<sup>20</sup> MECOVI is the Spanish acronym for "Mejoramiento de las Encuestas de Hogares y la Medición de Condiciones de Vida."

<sup>&</sup>lt;sup>21</sup> CEDLAS and LAC Poverty Group (2006) A Guide to the SEDLAC. World Bank (2007) "Poverty and

Despite the improvements (and, in some cases, because of the improvements), there remain time series comparability problems that are sometimes quite substantial. Similarly, underlying survey data differences affect comparisons across countries and result in problems of regional aggregation.<sup>22</sup>

Even where survey coverage and methodology have remained similar enough over a long time to reasonably support conclusions about progress on poverty, changes in relative prices and exchange rates must be addressed. Recent research suggests that this ought to be more complicated than simply scaling up a database by the new CPI, because relative prices of some goods disproportionately affect the poor.<sup>23</sup>

Finally, forecasts are often made and distributed between survey years based on macroeconomic growth rates and the assumption of constant distribution. It is not unusual for these forecasts to be significantly revised in later years.<sup>24</sup>

#### III. What Do the Data Tell Us?

#### **III.A.** Cross-country Comparisons

One expects poverty rates to be higher in poor countries, as they generally are. Table 3 provides data on average income and poverty rates in individual countries.

We tend to look to economically similar countries to set standards for their peers. Unfortunately, absolute cross-country comparisons are extremely problematic, whether one uses World Bank or CEPAL data. Differences in methodology and household survey design yield results that are not comparable. For example, the World Bank data indicate that poverty is twice as prevalent in Nicaragua as in Honduras, a result that is implausible, given their similar income levels and Honduras' higher inequality.

According to both the World Bank and CEPAL, Chile and Costa Rica stand out as countries with lower poverty rates than one would expect based on national income. On the other hand, Argentina and Venezuela have higher than expected poverty rates. But

Social Indicator Monitoring (MECOVI)."

<sup>&</sup>lt;sup>22</sup> CEDLAS and LAC Poverty Group (2006) A Guide to the SEDLAC. Wade, R. H. (2004) "Is Globalization Reducing Poverty and Inequality?"

<sup>&</sup>lt;sup>23</sup> All three sources use homogeneous price deflators that fail to account for differences in consumption patterns of the rich and poor. S. Suarez Dillon Soares and R. Guerreiro Osório construct price indices for each hundredth of the Brazilian population in "The Impact of Relative Prices on Welfare and Inequality in Brazil, 1995-2005," International Poverty Centre, Working Paper 37, May 2007. Their results show that distributional measures like the Gini coefficient are sensitive to class-specific price indices because prices of food and other basic goods do not move in close relationship to prices of luxuries like telecommunications and transportation. They suggest that the poor may be acutely sensitive to exchange rate movements during financial crises.

<sup>&</sup>lt;sup>24</sup> See for example, ECLAC (2006) Social Panorama of Latin America: 2006.

**Table 3: Moderate and Extreme Poverty Ranked by Average GDP per Capita, 2004 Percent of population** 

	GDP	Moderate	Poverty	Extreme l	Poverty
	per	World	CEPAL	World	CEPAL
	capita	Bank		Bank	
Haiti	\$437	75.8	n.a.	50.7	n.a.
Nicaragua	\$859	79.8	69.3	44.9	42.3
Honduras	\$968	36.0	74.8	14.1	53.9
Bolivia	\$1,039	42.8	63.9	23.9	34.7
Paraguay	\$1,348	29.8	65.9	13.6	36.9
Ecuador	\$1,501	35.2	51.2	14.7	22.3
Guatemala	\$1,721	31.0	60.2	13.1	30.9
Colombia	\$2,099	19.4	51.1	7.6	24.2
El Salvador	\$2,106	40.4	47.5	20.4	19.0
Peru	\$2,227	30.6	51.1	10.5	18.6
Dominican Republic	\$2,442	16.2	54.4	2.8	29.0
Brazil	\$3,564	19.8	37.7	7.6	12.1
LATIN AMERICA	\$4,044	22.3	42.0	8.7	16.9
Panama	\$4,217	16.8	31.8	6.0	14.8
Costa Rica	\$4,321	9.6	20.5	1.8	8.0
Venezuela	\$4,596	40.2	45.4	18.7	19.0
Chile	\$5,436	5.6	18.7	0.5	4.7
Uruguay (urban)	\$5,902	9.2	20.9	0.0	4.7
Mexico	\$6,056	12.5	37.0	1.9	11.7
Argentina (urban)	\$7,486	17.4	29.4	6.6	11.1

Notes: CEPAL estimates - Bolivia, Chile, & Honduras: 2003; Guatemala: 2002;

Nicaragua: 2001; Argentina & Uruguay: urban only.

Sources: ECLAC 2007; Chen and Ravallion 2007; World Bank 2007.

rankings of several countries are surprisingly different between the data sources: Mexico has far too much poverty for its income level according to CEPAL, but fits right into line if one ranks countries by income and poverty rates according to the World Bank.

Even where rankings are similar, the relative estimates of poverty can vary widely between sources. The World Bank average poverty level for the region is exactly half that reported by CEPAL, but this ratio varies considerably across countries. It is unusually high in Bolivia, Ecuador, El Salvador, Nicaragua and Venezuela. The World Bank estimates of poverty in Colombia, Chile, the Dominican Republic and Mexico are markedly lower than half the CEPAL rate. <sup>26</sup>

\_

<sup>&</sup>lt;sup>25</sup> These differences are only partly explained by CEPAL's country-specific poverty lines, as CEPAL sets very high poverty lines in both Mexico and Venezuela, but estimates comparatively higher poverty in Mexico and lower poverty in Venezuela than the World Bank.

<sup>&</sup>lt;sup>26</sup> The deviance of World Bank poverty rankings from GDP rankings ironically suggests that distribution matters greatly, although the Bank has tended to shy away from advocating strong redistributional policies, notwithstanding its recent publication of <u>World Development Report 2006</u>: <u>Equity and Development</u>.

#### III.B. Trends

#### Regional Averages 1989-2005

If absolute measures of poverty differ between data sources, can we find common trends? Data from all three sources suggest that poverty has declined in the region as a whole since 1990. CEPAL, the World Bank and CEDLAS all provide estimates of extreme and moderate poverty in 1990, and according to all three sources, in no year since then has the regional average exceeded the 1990 estimate (see Figures 2 and 3).

Figure 2

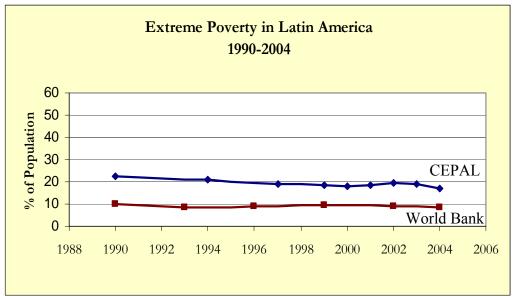
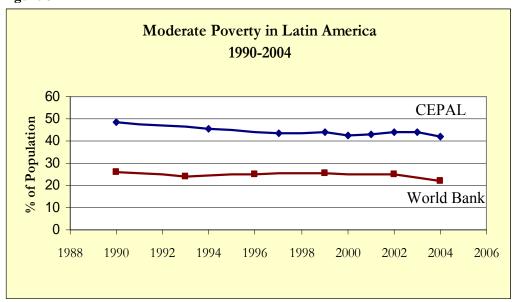


Figure 3



This improvement has been heralded by some as evidence that the region's turn toward market liberalization has proven successful. But unless income distribution deteriorates rapidly, more income per capita should pull a larger share of the population over a fixed poverty line. Regionally, Latin American economic growth per capita has averaged about 1 percent per year since 1990. This is very slow compared to most Asian countries, but it is positive. That one must ask whether poverty has fallen over the past decade and a half, and not by how much, suggests concern about regressive trends in inequality.

It is also hard to assess this data without asking, compared to when? Much debate about progress depends on the choice of a base year. 1990 arguably sets a low bar for the region, coming at the end of the debt crisis and widespread hyperinflation. According to CEPAL, the regional poverty rate only finally fell below the 1980 level in 2006.<sup>27</sup>

Choosing a more recent base year can be equally problematic. Since 1990, financial shocks have raised poverty rates in several countries, although at different times. Among the larger countries that dominate the regional average, shocks hit Mexico (1995), Brazil (1999), Argentina (2002) and Venezuela (1999, 2002-3). Progress on poverty in the intervening years is at least partly attributable to macroeconomic recovery and a return to trend. These crises make the choice of a base year difficult and complicate efforts to assess progress across countries.

#### The Aggregation Problem: Mexico, Brazil, and Everyone Else

Aggregation may be appealing as a tool to manage the stories of eighteen-plus countries, but it is almost meaningless from a policy perspective. Countries in the region do not move in sync economically, even if they adopt common policy stances like neoliberalism. Nor do the richer countries provide much aid to the poorest countries, notwithstanding Venezuela's aid to a few allies. Major social policies are set at the national level, and thus poverty is best viewed from a national perspective.

Together, Mexico and Brazil account for more than 40% of the region's moderately poor population, and regional averages are dominated by trends in these two countries. In fact, because Brazil's poverty rate has been stagnant over the past decade, the regional story is largely one about Mexico. When one disaggregates the data, as we do below, it seems less reasonable to generalize about progress in the region.

According to both CEPAL and the World Bank, Mexico has made dramatic headway against poverty. This trend was interrupted by the Peso Crisis of 1995, but gains since then have brought both moderate and extreme poverty levels below those of the 1980s. In fact, World Bank data support the controversial claim by some Mexican

methodologies.

<sup>&</sup>lt;sup>27</sup> ECLAC (2006) Social Panorama of Latin America: 2006. Note that comparisons between 1980 and 1990 are unreliable because of incomplete surveys, the difficulty of adjusting prices, and inconsistent

policymakers that extreme poverty has been almost eradicated.<sup>28</sup> By contrast, CEPAL data indicates that some 12 million Mexicans still cannot afford the cost of a basic food basket.

**Table 4: Mexico - Poverty Headcount Ratios, 1981-2004**Percent of population

		1981	1989/1990	1996	2001/2002	2004		
Extreme	CEPAL		18.7	22.0	12.6	11.7		
Poverty	World Bank	10.9	6.2	7.8	4.3	1.9		
Moderate	CEPAL		47.7	52.9	39.4	37.0		
Poverty	World Bank	34.7	24.3	27.8	21.2	12.5		
Sources: ECLAC 2007; Chen and Ravallion 2007.								

Some readers will wonder about this evidence. How can such progress be consistent with recent political strife? Perhaps it is about the speed and not the direction of poverty reduction, or the fact that, as indicated by CEPAL (but not the World Bank), Mexico's poverty rate is far above what one would expect given its income level.

Discord about equity in Mexico, even when the data are consistent about the direction of trend, highlights the complexity of poverty discussed earlier. The hardships associated with neoliberalism have unevenly affected low-income Mexicans, depending on their geographic region, economic sector and occupation. The basic data provide no information about the distribution of households around the poverty line, nor about chronic poverty and ethnic segregation, and they rely on a poverty line that may be too low for an affluent country like Mexico. 30

Brazil has also made considerable progress since 1990, but very little, if any, progress over the past decade. This is surprising, given liberal leaders' implementation of highly visible anti-poverty programs, including Bolsa Familia. Yet national poverty rates, both extreme and moderate, have changed very little – and may even have increased – since 1996. (The World Bank data suggests an increase in extreme poverty; CEPAL data shows an increase in moderate poverty.) Progress toward achieving the Millennium

<sup>29</sup> Peasant farmers in southern Mexico have been hurt, while many low income Mexicans in the north have gained access to industrial jobs and migrant work in the US. Work by Laos (2000) also suggests that the restructuring of the Mexican economy may have more negatively affected the working class (or near-poor) than the poor. For a concise overview of geographic inequality and the consequences of neoliberalism in Mexico, see "Mexico's Mezzogiorno: What is Needed to Bridge the Gaping North-South Divide," *The* 

Economist, November 18, 2006, Survey of Mexico, p. 5.

<sup>&</sup>lt;sup>28</sup> Damián, A. and J. Boltvinik point out that the absolute number of Mexicans living below the official food-based poverty line actually rose between 1992 and 2000. They also show that the city-size cutoff between rural and urban areas may skew the evidence of declining headcount ratios. Damián, A. and J. Boltvinik (2003). "Evolución y características de la pobreza en México." Comercio Exterior **53**(6): 519-

<sup>&</sup>lt;sup>30</sup> See Bolvinik (2001), "Opciones methodologicas para medir la pobreza en México," <u>Comercio Exterior</u>, Octubre. 2001, pp. 869-878, for a discussion of appropriate poverty lines in Mexico.

Development Goal of halving the 1990 extreme poverty rate by 2015 largely reflects recovery from the hyperinflation crisis of 1989-91.<sup>31</sup>

**Table 5: Brazil - Poverty Headcount Ratios, 1981-2004**Percent of population

		1981	1989/1990	1996	2001/2002	2004		
Extreme	CEPAL		23.4	13.9	13.2	12.1		
Poverty	World Bank	11.8	14.0	6.9	6.7	7.6		
Moderate	CEPAL		48.0	35.8	37.5	37.7		
Poverty	World Bank	31.1	32.3	21.7	21.2	19.8		
Sources: ECLAC 2007; Chen and Ravallion 2007.								

One explanation for Brazil's stubborn poverty is its stagnant economy. GDP per capita has grown very slowly over the past decade and a half — 0.6 percent, compared to 1.6% in Mexico — and distributional shifts, while favorable, have been miniscule. Furthermore, its efforts to reduce poverty are set in a much poorer country: per capita GDP in Brazil is 42% less than in Mexico. Even if the depth of poverty (the poverty gap) were the same — it is worse in Brazil — it would take faster growth or proportionately greater redistribution in Brazil to achieve comparable progress.

Based on the preponderance of evidence, the gap in progress between Mexico and Brazil is almost certainly real. But if Mexico's wealth, more rapid growth and more equitable income distribution explains its faster progress against poverty, it does not answer why, according to CEPAL, the two countries have similar levels of poverty (about 37% in 2004). For that, one must return to table 1, which shows that CEPAL sets Mexico's poverty line at \$70.60 and Brazil's at \$26.10, as well as to the earlier discussion of how imputed rents, adult equivalence and under-reported income are treated. In other words, this may be a statistical artifact.

#### **Everyone Else**

If we take out Mexico and Brazil, or slightly more than half the regional population,<sup>32</sup> is there a consistent story in the remaining countries? Among the remaining countries, the regional aggregate poverty rate has climbed. Aggregated World Bank data is presented in Table 6.<sup>33</sup>

<sup>32</sup> No other country comes close in size to Brazil (186 million) or Mexico (103 million). Colombia, with 46 million people, accounts for 8% of the region's population of 551 million. Argentina (7%), Peru (5%) and Venezuela (5%) follow. Other countries each hold less than 3% of the region's population (World Bank, 2007, WDI Online).

<sup>&</sup>lt;sup>31</sup> There has been notable progress in reducing rural poverty in Brazil.

<sup>&</sup>lt;sup>33</sup> We have included Uruguay in regional averages, but because its poverty data is so sparse, we have not included it in the discussion of individual countries.

Interestingly, this deterioration is not mainly about the poorest countries getting poorer. It is in the next four largest countries – Colombia, Argentina, Peru and Venezuela, none of which are poor by regional standards – that poverty has risen dramatically, at least according to the World Bank. Together, they account for 25% of the region's population.

**Table 6: Aggregate Poverty Ratios, 1981-2004, World Bank PovcalNet Data** Percent of population

	1981	1990	1996	2002	2004
Extreme Poverty					
Latin America	10.2	9.6	8.1	8.4	8.0
Latin America without Brazil and					
Mexico	8.5	7.4	9.3	11.7	11.1
<b>Medium Four Countries</b>	4.0	1.7	6.9	10.9	10.1
<b>Poorest Six Countries</b>	24.0	26.8	27.4	27.0	25.7
Small Countries with Signs of Progress	15.6	13.0	7.5	7.0	7.0
Moderate Poverty					
Latin America	27.9	25.6	24.4	24.0	21.4
Latin America without Brazil and					
Mexico	21.8	20.5	25.0	27.5	26.7
<b>Medium Four Countries</b>	13.1	11.0	21.9	26.7	25.3
<b>Poorest Six Countries</b>	46.3	49.2	49.0	49.4	48.0
Small Countries with Signs of	2.4.5	•		10.5	10.1
Progress	34.5	29.9	21.5	18.7	19.1

Notes: "Latin America" includes Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay, and Venezuela. "Small Countries with Signs of Progress" include Chile, Costa Rica, Dominican Republic, El Salvador, Guatemala, and Panama. "Medium Four Countries" include Argentina, Colombia, Peru, and Venezuela. "Poorest Six Countries" include Bolivia, Ecuador, Haiti, Honduras, Nicaragua, and Paraguay.

Sources: Chen and Ravallion 2007; World Bank 2007.

If the lesson here is to disaggregate data by country, can we draw firm conclusions about any of the four medium size countries? Again, the data source matters. There is a clear deterioration in poverty levels in all four countries since 1989/90 according to World Bank data, but CEPAL data actually shows improvement in Colombia, and much less deterioration in Venezuela (see Table7).34

Table 7: Medium Four Countries, Moderate Poverty, 1980-2004 Percent of population

	1980-81	1989-91	1995-97	2000-02	2003-04		
ARGENTINA (urban only)							
PovcalNet (World Bank)	1.4	8.3	9.8	21.6	17.4		
BADEINSO (CEPAL)	8.5			45.4	29.4		
COLOMBIA							
PovcalNet (World Bank)	20.2	11.7	18.9	19.4	19.4		
BADEINSO (CEPAL)	42.3	56.1 (MC)	50.9	51.1 (MC)	51.1		
PERU							
PovcalNet (World Bank)	9.6	10.4	28.4	32.2	30.6		
BADEINSO (CEPAL)			47.6	54.8 (MC)	54.7		
VENEZUELA							
PovcalNet (World Bank)	22.6	14.5	36.6	40.2	40.2		
BADEINSO (CEPAL)	25.0	39.8	48.0	48.6	45.4		

Note: "MC" indicates significant change in survey methodology, such that the estimate is not considered comparable to previous years.

Sources: Chen and Ravallion 2001 and 2007; ECLAC 2007; World Bank 2007.

<sup>34</sup> Particularly in Venezuela, the absence of recent data makes it difficult to assess the impact of radical shifts in economic and social policy.

Among the poorest six countries, only in Honduras is there a significant improvement reported by both the World Bank and CEPAL data (see Table 8). However, the striking progress in Honduras reported by the World Bank is not confirmed by CEPAL, which shows much smaller gains, or by CEDLAS, which shows *increasing* poverty. (See the appendix for detail.) Data from the World Bank suggest that Nicaragua and Haiti have seen slight declines in poverty. For Nicaragua, this finding is supported by (admittedly sparse) estimates from CEPAL. In the case of Haiti, poverty estimates are not available from CEPAL or CEDLAS.

Data from Bolivia, Ecuador and Paraguay show deterioration in poverty rates since 1990 across sources, but each shows markedly different rates of change within subperiods. Data sparseness is a particularly severe problem for Ecuador, while Paraguay's data suffer most from inconsistency.

Table 8: Poorest Six Countries, Moderate Poverty, 1980-2004

Percent of population

24.0	28.7	<b>1995-97</b> 40.1	42.9	2003-04
			42.9	42.0
			42.9	42.0
••				42.8
		62.1	62.4	63.9
28.8	31.2	37.4	36.9	35.2
			49.1	51.2
77.3	79.0	81.7	77.6	75.8
59.8	64.2	31.6	36.0	36.0
••	80.8	79.1	77.3	74.8
60.7	84.3	77.2	81.6	79.8
••	73.6	••	69.3	
	(1993)			
23.9	26.3	34.3	33.2	29.8
			61.0	65.9
	77.3  59.8  60.7 	77.3 79.0 59.8 64.2 80.8  60.7 84.3 73.6 (1993)  23.9 26.3	77.3     79.0       81.7           59.8     64.2        80.8       79.1       60.7     84.3        73.6       (1993)       23.9     26.3 <td>       49.1       77.3     79.0     81.7     77.6             59.8     64.2     31.6     36.0        80.8     79.1     77.3       60.7     84.3     77.2     81.6        73.6      69.3       (1993)      69.3       23.9     26.3     34.3     33.2</td>	49.1       77.3     79.0     81.7     77.6             59.8     64.2     31.6     36.0        80.8     79.1     77.3       60.7     84.3     77.2     81.6        73.6      69.3       (1993)      69.3       23.9     26.3     34.3     33.2

*Note:* "MC" indicates significant change in survey methodology, such that the estimate is not considered comparable to previous years.

Sources: Chen and Ravallion 2001 and 2007; ECLAC 2007; World Bank 2007.

Among the small middle income countries, several have made gains against poverty (see Table 9). In the cases of Chile, Costa Rica, and Guatemala, the gains have been dramatic, although Guatemala's data is incomplete. To a lesser degree, El Salvador and Panama have also reduced poverty. Progress in the Dominican Republic is contradicted by CEDLAS data, which shows a rise in moderate poverty from 8% in 1995 to 16.4% in 2003.

World Bank data indicate that, as a group, these countries have reduced moderate poverty from 30% to 19%, and extreme poverty from 13% to 7%. Unfortunately, together they account for only 9.5% of the region's population. Nonetheless, some of them may provide replicable policy models for other Latin American countries.

**Table 9: Small Countries with Signs of Progress, Moderate Poverty, 1980-2004 Percent of population** 

	1980-81	1989-91	1995-97	2000-02	2003-04		
CHILE							
PovcalNet (World Bank)	17.9	14.1	8.2	5.6	5.6		
BADEINSO (CEPAL)		38.6	23.2	20.2	18.7		
COSTA RICA							
PovcalNet (World Bank)	32.0	16.1	13.3	8.9	9.6		
BADEINSO (CEPAL)	23.6	26.3	22.5	20.3	20.5		
DOMINICAN REPUBLIC							
PovcalNet (World Bank)	29.5	21.4	11.7	12.1	16.2		
BADEINSO (CEPAL)			8.0				
EL SALVADOR							
PovcalNet (World Bank)	39.7	43.0	51.9	40.5	40.4		
BADEINSO (CEPAL)			55.5	48.9	47.5		
GUATEMALA							
PovcalNet (World Bank)	68.1	58.8	34.4	32.6	31.0		
BADEINSO (CEPAL)	71.1	69.4		60.2			
PANAMA							
PovcalNet (World Bank)	12.7	24.1	18.5	17.5	16.8		
BADEINSO (CEPAL)		41.0 (1986)		34.0	31.8		

*Note:* "MC" indicates significant change in survey methodology, such that the estimate is not considered comparable to previous years.

Sources: Chen and Ravallion 2001 and 2007; ECLAC 2007; World Bank 2007.

At this point, it must be apparent that the authors have only drawn cautious conclusions about the direction of change. While policy debate ought to be about the pace of progress in the context of economic growth, we would not hazard guesses about the exact pace of progress anywhere. Inconsistencies between the data sources are simply too pervasive to support such an analysis, and in some cases, even the direction of progress is questionable. Poverty has probably declined in Mexico, Chile, Costa Rica, Panama, El Salvador, Nicaragua, Honduras, Guatemala, and Brazil; it has probably increased in Bolivia, Ecuador, Argentina, Peru, Colombia, Paraguay, Venezuela and Uruguay.

Skeptical readers might find even these tentative interpretations unfounded, given the erratic nature of the data.

Equally difficult is an assessment of data on the 'poverty gap,' or the average shortfall of income from the poverty line. Where the poverty gap is small, it is often argued that households move back and forth across the poverty line, affecting poverty rates but having little impact on the quality of the life for the poor/nearly poor.

Poverty gap data is published by the World Bank, CEPAL and CEDLAS, but interpreting it is treacherous. In 1998, for example, the World Bank reported that the poverty gap for Guatemala, one of the poorest countries in the region, was the same as that of Mexico, and lower than that of Costa Rica. Moreover, it is not uncommon for poverty gap estimates to be as little as zero or one percent, even where poverty is prevalent. It is possible to construct a few credible stories from this data (e.g., the poverty gap in Argentina rose in the early 2000s), but a systematic analysis would also yield as many implausible interpretations.<sup>35</sup>

#### III.C. Progress, Growth and Distribution

Explanations for changes in poverty levels typically come down to two issues: growth and distribution. These in turn depend on productivity, education, social mobility, land use, employment, the distribution of assets, and the structure of taxes and subsidies, among other factors. Which of these policies is most important in overcoming poverty, and whether they are at odds with one another or can operate in concert, has been the subject of intense debate, particularly in the context of neoliberal reform.

Table 10 provides data on growth and distribution by country for readers who hope to make sense of overall trends in the poverty data, however tentatively. Compared to other regions of the world, Latin America has been doubly cursed: growth has been slow, and nearly every country ranks among the most unequal in the world.

\_

World Bank (2007) Millennium Development Goals Quick Query, http://ddp-ext.worldbank.org/ext/DDPQQ/member.do?method=getMembers&userid=1&queryId=27.

**Table 10: Growth and Distribution in Latin America** 1990-2004

Country (Gini dates)	GDP/cap growth, 1990-2004	Gini coefficient, early 1990s	Gini coefficient, early 2000s
<b>Argentina</b> (1990, 2004)	1.9	50.1	53.1
<b>Bolivia</b> (1989, 2002)	1.3	53.8	61.4
<b>Brazil</b> (1990, 2003)	0.6	62.7	61.2
<b>Chile</b> (1990, 2003)	4.0	55.4	55.2
<b>Colombia</b> (1994, 2004)	1.0	60.1	57.7
<b>Costa Rica</b> (1990, 2004)	2.3	43.8	47.8
<b>Dom. Rep.</b> (1997, 2004)	2.7	51.7	58.6
Ecuador (2004)	0.8		51.3
<b>El Salvador</b> (1995, 2004)	1.9	50.7	49.3
<b>Guatemala</b> (1989, 2002)	1.2	58.2	54.3
<b>Honduras</b> (1990, 2003)	0.4	61.5	58.7
<b>Mexico</b> (1989, 2004)	1.5	53.6	51.6
Nicaragua (1993, 2001)	0.8	58.2	57.9
<b>Panama</b> (1991, 2004)	2.8	54.5	54.8
Paraguay (1990, 2004)	0.6	44.7	54.8
<b>Peru</b> (1997, 2004)	1.5	53.2	50.5
<b>Uruguay</b> (1990, 2004)	1.3	49.2	46.4
Venezuela (1990, 2004)	0.2	47.1	47.0
Latin America	1.1		
Sources: GDP: World Bank	WDI Online: Ginis: 0	CEPAL BADEINSO	online (July 2007

Sources: GDP: World Bank, WDI Online; Ginis: CEPAL, BADEINSO online (July 2007, Chile Gini data from March 2007)

The relatively fastest growing countries, Chile, Costa Rica, Panama and El Salvador have all seen reductions in poverty since 1990. At the opposite extreme, Brazil, Ecuador, Honduras, Nicaragua, Paraguay, and Venezuela have had very slow growth, and none have had unambiguous evidence of declining poverty.

Distribution has improved, at least a little, in several countries. But this is not the case in Argentina, Bolivia, Costa Rica, the Dominican Republic, El Salvador, Paraguay and Venezuela, at least prior to the early 2000s. The failure to improve distribution has been associated with higher poverty rates in all of these cases except Costa Rica and El Salvador. Even in Argentina and Bolivia, the salutary effect of decent growth has been entirely undermined by rising inequality.<sup>36</sup>

What kind of progress *should* we expect if an economy is growing? Better data would support informed debate on the pace of progress under various macroeconomic scenarios, and the effectiveness of strategies to overcome persistent poverty. Recent

\_

<sup>&</sup>lt;sup>36</sup> Curiously, Peru has seen both decent growth and a modest improvement in equality, but poverty has increased. What might be going on? The Gini coefficient captures distribution across all levels of income, while poverty affects only the bottom quintiles (except in the poorest countries). Thus, Gini coefficients can decline in the absence of gains to the poor. Decile-by-decile distributional data provides a better sense of the role of distribution in fighting poverty.

efforts have been made to estimate the elasticity of poverty with respect to growth. <sup>37</sup> Crucially, the effect of growth on poverty depends on income distribution. If income is inequitably distributed, fewer of the benefits of growth reach the poor, and progress is slower than in more equal societies. The fact that poverty is as high and as stubborn as it is in Latin America reflects the fact that trickle down is extremely slow in the context of income inequality.

In the absence of rapid growth and progress on overall inequality, social policy is essential to change poverty rates. Much has been made of the impact of Mexico's Oportunidades program on extreme poverty rates, even as it costs less than half a percent of its GDP. Combined with an influx of worker remittances, cash payments from Oportunidades have helped push many Mexicans over the poverty line. In wealthier countries like Mexico, it may be possible to reduce poverty, as it has been narrowly defined here, with minimal redistribution. Creating jobs and incorporating the poor into a common 'middle income' economy will be more challenging. In countries where poverty is deeper, progress will require tackling inequality.

The reduction of poverty through conditional cash transfer programs like Oportunidades returns us to questions about how we measure poverty. Small cash transfers to the poor obviously reduce official estimates of poverty. The associated incentives to increase school attendance and health checkups may also raise standards of living in the long run. Yet if policy makers are forced to choose between these programs and food subsidies, sewerage construction or road paving in poor neighborhoods, accurate accounting of such trade-offs is unlikely to occur in our poverty data. In other words, even as we argue that a dramatic reduction in poverty lies well within the grasp of wealthier Latin American countries, the measurement of that success is sure to provoke controversy. <sup>38</sup>

#### IV. Conclusions

Poverty in Latin America is complex, and progress requires an ongoing effort to set priorities that genuinely improve the quality of life, whether through better labor laws, lower crime rates, or rural electrification. Measuring progress, a task essential to assessing policy, is no simple matter.

Even if one focuses narrowly on the percent of households that fall below an absolute poverty line, this headcount approach provides no information about the depth of poverty below that line, nor much information about the quality of life in households

\_

<sup>&</sup>lt;sup>37</sup> Using World Bank data, A. Kalwij and A. Verschoor estimate the elasticity of poverty reduction with respect to growth in "Not by growth alone: The role of the distribution of income in regional diversity in poverty reduction." <u>European Economic Review</u>, May 2007.

<sup>&</sup>lt;sup>38</sup> For a review of conditional cash transfer programs, see S. Handa and B. Davis (2006) "The Experience of Conditional Cash Transfers in Latin America and the Caribbean," <u>Development Policy Review</u> **24**(5): 513-536, September 2006.

with such meager economic resources. Yet even a straightforward estimate of absolute poverty is elusive.

The three main international sources of data, CEPAL, the World Bank, and CEDLAS, turn out to be neither independent, in the sense that they draw on common household surveys by national governments, nor particularly consistent. Different poverty lines and methodological choices lead to markedly different estimates, despite common survey data. As Székely, *et al*, comment, "Given the possible range of results and the lack of a standard, widely accepted methodology, these statistics become practically meaningless if the user does not have at least some minimum guidance and explicit information on the underlying choices that are necessary to interpret them." <sup>39</sup>

Readers will undoubtedly take away from this a strong dose of skepticism about the usefulness of poverty data. Unfortunately, skepticism is no substitute for understanding how macroeconomic and social policies affect poor families. Thus we find ourselves trying to parse reality from the patchwork of available data.

It is tempting to dismiss differences between the estimates, and to focus exclusively on trends. Doing so means giving up the hope of understanding the scale of deprivation. In a relatively rich region, it should matter whether 10% or 20% of the population lacks the resources needed to buy a basic basket of food, even if we quibble about what should be included in the contents of that basket. This should matter not only to domestic policymakers, but also to international relief organizations that hope to direct their aid to countries where it is most needed.

There are some consistent trends across sources that may satisfy readers seeking a balance between agnosticism and blind confidence in the data. 40 Most hopefully, Mexico has reversed the sharp increase in poverty that followed the Peso crisis. Panama also made significant headway over the past decade and half. But poverty has probably risen, despite economic growth, in Argentina, Bolivia, Ecuador, Paraguay, Peru, Uruguay and Venezuela. Elsewhere, the gains are very modest, or direction of trend depends on the data source used and the sub-period under consideration

That said, many countries have experienced unambiguous 'progress' that is little more than a recovery from macroeconomic shocks. Others have fallen into prolonged periods of stagnation and can claim progress only by reaching back to gains from the early 1990s. Where we are able to make such statements confidently, we at least have the option of informed policy discussion. In many instances, however, we simply cannot find consistent data.

<sup>&</sup>lt;sup>39</sup> Szekely, et al., 7.

<sup>&</sup>lt;sup>40</sup> John Sheahan has pointed out that there have been many individual country studies in which the authors have gone to great lengths to sort out what has happened to poverty in the particular country studied, with results that often seem valid. These studies, many by historians, political scientists, and sociologists, can offer a fuller understanding of the context in which the poor live.

The purpose of collecting poverty data is to identify policies that successfully ameliorate the hardships faced by the poor. International institutions can create a stronger basis for assessing anti-poverty policies by creating common, transparent approaches to data collection. Until then, conclusions from empirical research must be tempered with awareness that not only the pace of change, but the very direction of change may be contradicted elsewhere. This is not to suggest that we should reject the evidence entirely. Rather, we counsel caution in the use of this data. None of the three sources seems more reliable or sensible in its handling of the data.

It is common to turn to 'facts' in the heat of an ideological debate, and poverty is one of the most contentious topics in development economics. The evidence presented here suggests that few arguments will be resolved with the international data on poverty. If one must resort to picking one of these data sources over another to demonstrate progress, much less adequate progress, the poor themselves are right to cry foul.

Ann Helwege is Senior Research Fellow and Melissa B.L. Birch is Research Assistant at the Global Development and Environment Institute, Tufts University; inquiries can be directed to ahelwege@yahoo.com.

#### Appendix

**Table A-1: Extreme Poverty** Percent of population

	1980-81	1989-91	1995-97	2000-02	2003-04
ARGENTINA (urban only	·)				
PovcalNet (World Bank)		0.3	1.1	7.5	6.6
BADEINSO (CEPAL)		••	••	20.9	11.1
SEDLAC (CEDLAS)		1.0	3.7 (MC)	6.9 (MC)	5.5 (MC)
BOLIVIA					
PovcalNet (World Bank)	3.3	5.7	21.1	24.0	23.9
BADEINSO (CEPAL)			37.2	37.1	34.7
SEDLAC (CEDLAS)		••	18.3	28.3	
BRAZIL					
PovcalNet (World Bank)	11.8	14.0	6.9	6.7	7.6
BADEINSO (CEPAL)		23.4	13.9	13.2	12.1
SEDLAC (CEDLAS)		11.7	8.7	8.5	6.9
CHILE	•	•		•	
PovcalNet (World Bank)	2.7	2.0	0.0	0.5	0.5
BADEINSO (CEPAL)		13.0	5.7	5.6	4.7
SEDLAC (CEDLAS)		3.3	1.5	1.6	1.4
COLOMBIA	•	1		•	
PovcalNet (World Bank)	7.9	2.6	5.6	7.6	7.6
BADEINSO (CEPAL)		26.1(MC)	23.5	24.6 (MC)	24.2
SEDLAC (CEDLAS)			8.8	12.4	14.8 (MC
COSTA RICA					
PovcalNet (World Bank)	14.8	5.2	3.6	1.6	1.8
BADEINSO (CEPAL)		9.9	7.8	8.2	8.0
SEDLAC (CEDLAS)		6.1	3.4	4.3	3.6
DOMINICAN REPUBLIC	7				
PovcalNet (World Bank)	11.0	3.9	1.8	1.9	2.8
BADEINSO (CEPAL)			22.1	20.3	29.0
SEDLAC (CEDLAS)		••	2.1	3.9 (MC)	3.4
ECUADOR					
PovcalNet (World Bank)	12.4	13.6	16.3	15.6	14.7
BADEINSO (CEPAL)		••	••		22.3
SEDLAC (CEDLAS)				23.0	14.7 (MC)
EL SALVADOR					
PovcalNet (World Bank)	19.6	21.4	25.3	20.4	20.4
BADEINSO (CEPAL)		••	21.7	22.1	19.0
SEDLAC (CEDLAS)	••	24.9	••	19.8	16.4
GUATEMALA					
PovcalNet (World Bank)	41.4	34.9	13.9	13.9	13.1
BADEINSO (CEPAL)		42.0		30.9	
SEDLAC (CEDLAS)	+	<b>†</b>		15.4	12.8

	1980-81	1989-91	1995-97	2000-02	2003-04
HAITI					
PovcalNet (World Bank)	52.6	54.8	58.8	52.9	50.7
BADEINSO (CEPAL)					
SEDLAC (CEDLAS)	••				••
HONDURAS	1	•		-	
PovcalNet (World Bank)	33.0	37.8	12.3	14.1	14.1
BADEINSO (CEPAL)		60.9	54.4	54.4	53.9
SEDLAC (CEDLAS)			12.0		16.8
MEXICO	•				
PovcalNet (World Bank)	10.9	6.2	7.8	4.3	1.9
BADEINSO (CEPAL)		18.7	22.0	12.6	11.7
SEDLAC (CEDLAS)		10.9	19.4	10.0	10.4
NICARAGUA					
PovcalNet (World Bank)	29.5	57.7	44.5	47.7	44.9
BADEINSO (CEPAL)		48.4		42.3	
( - )		(1993)			
SEDLAC (CEDLAS)		31.8		18.0	••
` ,		(1993)			
PANAMA					
PovcalNet (World Bank)	2.1	11.8	7.9	6.1	6.0
BADEINSO (CEPAL)		19.7		17.4	••
		(1986)			
SEDLAC (CEDLAS)	••	17.0	11.4	11.5	6.1
PARAGUAY					
PovcalNet (World Bank)	4.0	4.9	17.5	16.4	13.6
BADEINSO (CEPAL)	••	••	33.2		36.9
SEDLAC (CEDLAS)			11.0	12.6	10.2
PERU					
PovcalNet (World Bank)	1.1	1.4	8.9	12.9	10.5
BADEINSO (CEPAL)			25.1	24.4 (MC)	18.6
SEDLAC (CEDLAS)			14.3	14.9 (MC)	10.0
URUGUAY					
PovcalNet (World Bank)			0.8	0.0	0.0
BADEINSO (CEPAL)	3.3	3.4	1.7	2.5	4.7
SEDLAC (CEDLAS)		0.3	0.8	0.3	0.8
VENEZUELA					
PovcalNet (World Bank)	6.3	3.0	14.8	18.7	18.7
BADEINSO (CEPAL)	8.6	14.4	20.5	22.2	19.0
SEDLAC (CEDLAS)					
Note: "MC" indicates signifi	cant change i	n survey met	hodology suc	ch that the esti	mate is not

Note: "MC" indicates significant change in survey methodology, such that the estimate is not considered comparable to previous years. *Sources:* Chen and Ravallion 2007; ECLAC 2007; CEDLAS and LAC Poverty Group 2007.

**Table A-2: Moderate Poverty** Percent of population

Percent of population	1980-81	1989-91	1995-97	2000-02	2003-04
ARGENTINA (urban only					
PovcalNet (World Bank)	1.4	8.3	9.8	21.6	17.4
BADEINSO (CEPAL)	8.5			45.4	29.4
SEDLAC (CEDLAS)		3.5	8.9 (MC)	24.7 (MC)	14.9 (MC)
BOLIVIA	1			( -/	( -)
PovcalNet (World Bank)	24.0	28.7	40.1	42.9	42.8
BADEINSO (CEPAL)			62.1	62.4	63.9
SEDLAC (CEDLAS)			36.2	43.1	
BRAZIL	1			I.	
PovcalNet (World Bank)	31.1	32.3	21.7	21.2	19.8
BADEINSO (CEPAL)		48.0	35.8	37.5	37.7
SEDLAC (CEDLAS)					
CHILE	•			•	
PovcalNet (World Bank)	17.9	14.1	8.2	5.6	5.6
BADEINSO (CEPAL)		38.6	23.2	20.2	18.7
SEDLAC (CEDLAS)		14.4	6.8	5.9	5.1
COLOMBIA	•			•	
PovcalNet (World Bank)	20.2	11.7	18.9	19.4	19.4
BADEINSO (CEPAL)	42.3	56.1 (MC)	50.9	51.1 (MC)	51.1
SEDLAC (CEDLAS)			16.7	23.2	26.3 (MC)
COSTA RICA	•			•	
PovcalNet (World Bank)	32.0	16.1	13.3	8.9	9.6
BADEINSO (CEPAL)	23.6	26.3	22.5	20.3	20.5
SEDLAC (CEDLAS)		13.3	8.5	9.6	8.3
DOMINICAN REPUBLIC	1,				
PovcalNet (World Bank)	29.5	21.4	11.7	12.1	16.2
BADEINSO (CEPAL)			8.0		••
SEDLAC (CEDLAS)				16.5	16.4
ECUADOR					
PovcalNet (World Bank)	28.8	31.2	37.4	36.9	35.2
BADEINSO (CEPAL)				49.1	51.2
SEDLAC (CEDLAS)			29.3		37.2 (MC)
EL SALVADOR	•			•	
PovcalNet (World Bank)	39.7	43.0	51.9	40.5	40.4
BADEINSO (CEPAL)			55.5	48.9	47.5
SEDLAC (CEDLAS)		51.1	••	41.4	38.7
GUATEMALA	1			•	
PovcalNet (World Bank)	68.1	58.8	34.4	32.6	31.0
BADEINSO (CEPAL)	71.1	69.4	••	60.2	
SEDLAC (CEDLAS)			••	34.3	34.9
HAITI	1				
PovcalNet (World Bank)	77.3	79.0	81.7	77.6	75.8
` /	···				
BADEINSO (CEPAL) SEDLAC (CEDLAS)					

	1980-81	1989-91	1995-97	2000-02	2003-04
HONDURAS			•		
PovcalNet (World Bank)	59.8	64.2	31.6	36.0	36.0
BADEINSO (CEPAL)		80.8	79.1	77.3	74.8
SEDLAC (CEDLAS)		••	32.6		37.4
MEXICO					
PovcalNet (World Bank)	34.7	24.3	27.8	21.2	12.5
BADEINSO (CEPAL)		47.7	52.9	39.4	37.0
SEDLAC (CEDLAS)					
NICARAGUA					
PovcalNet (World Bank)	60.7	84.3	77.2	81.6	79.8
BADEINSO (CEPAL)		73.6		69.3	
		(1993)			
SEDLAC (CEDLAS)		58.6		45.8	
,		(1993)			
PANAMA					
PovcalNet (World Bank)	12.7	24.1	18.5	17.5	16.8
BADEINSO (CEPAL)		41.0		34.0	31.8
		(1986)			
SEDLAC (CEDLAS)		26.3	19.6	17.7	15.8
PARAGUAY					
PovcalNet (World Bank)	23.9	26.3	34.3	33.2	29.8
BADEINSO (CEPAL)				61.0	65.9
SEDLAC (CEDLAS)			24.6	25.7	26.0
PERU					
PovcalNet (World Bank)	9.6	10.4	28.4	32.2	30.6
BADEINSO (CEPAL)		••	47.6	54.8 (MC)	54.7
SEDLAC (CEDLAS)		••	32.6	36.1 (MC)	30.2
URUGUAY					
PovcalNet (World Bank)					
BADEINSO (CEPAL)					
SEDLAC (CEDLAS)					
VENEZUELA					
PovcalNet (World Bank)	22.6	14.5	36.6	40.2	40.2
BADEINSO (CEPAL)	25.0	39.8	48.0	48.6	45.4
SEDLAC (CEDLAS)					
Note: "MC" indicates signif	icant change i	n survey met	hodology, suc	ch that the estin	mate is not

*Note:* "MC" indicates significant change in survey methodology, such that the estimate is not considered comparable to previous years. *Sources:* Chen and Ravallion 2007; ECLAC 2007; CEDLAS and LAC Poverty Group 2007.

#### **Acronyms:**

BADEINSO: Base de Estadísticas e Indicadores Sociales

CEDLAS: Centro de Estudios Distributivos Laborales y Sociales

CEPAL: Comisión Económica para América Latina y el Caribe (also, Economic

Commission for Latin America and the Caribbean, ECLAC)

SEDLAC: Socio-Economic Database for Latin America and the Caribbean

WDI: World Development Indicators

#### **Data Links:**

CEDLAS: <a href="http://www.depeco.econo.unlp.edu.ar/cedlas/sedlac/statistics.htm">http://www.depeco.econo.unlp.edu.ar/cedlas/sedlac/statistics.htm</a>

CEPAL: http://websie.eclac.cl/sisgen/ConsultaIntegrada.asp?idAplicacion=1

World Bank PovcalNet: <a href="http://iresearch.worldbank.org/PovcalNet/jsp/index.jsp">http://iresearch.worldbank.org/PovcalNet/jsp/index.jsp</a>

World Bank World Development Indicators:

http://web.worldbank.org/WBSITE/EXTERNAL/DATASTATISTICS/0,,content MDK:20398986~menuPK:64133163~pagePK:64133150~piPK:64133175~theSit ePK:239419,00.html

#### REFERENCES

- Banerjee, A., and E. Duflo, "The Economic Lives of the Poor," <u>Journal of Economic Perspectives</u>, Vol 21, No. 1, Winter 2007, pp. 141-167.
- Boltvinik, J. (2003). "Tipología de los métodos de medición de la pobreza. Los métodos combinados." Comercio Exterior 53(5): 453-465.
- CEDLAS Universidad Nacional de La Plata and LAC Poverty Group (LCSPP) and MECOVI Program The World Bank (2006). Socio-Economic Database for Latin America and the Caribbean (SEDLAC).
- CEDLAS Universidad Nacional de La Plata and T. W. B. LAC Poverty Group (2006). A Guide to the SEDLAC: Socio-Economic Database for Latin America and the Caribbean. La Plata, CEDLAS.
- Chen, S. (2007). Personal Communication. M. B. L. Birch.
- Chen, S. and M. Ravallion (2004). "How Have the World's Poorest Fared since the Early 1980s?" The World Bank Research Observer 19(2).
- Chen, S. and M. Ravallion (2007). PovcalNet, World Bank.
- Chen, S. H. and M. Ravallion (2001). "How did the world's poorest fare in the 1990s?" Review of Income and Wealth(3): 283-300.
- Damián, A. and J. Boltvinik (2003). "Evolución y características de la pobreza en México." <u>Comercio Exterior</u> 53(6): 519-531.
- Damián, A. and J. Boltvinik (2006). "A Table to Eat on," in E. Hershberg and F. Rosen, Latin America after Neoliberalism, New Press.
- Economic Commission for Latin America and the Caribbean (2005). The Millennium Development Goals: A Latin American Perspective. Santiago, Chile, Economic Commission for Latin America and the Caribbean.
- Economic Commission for Latin America and the Caribbean (2006). Social Panorama of Latin America 2005. Santiago, Chile, United Nations Publications.
- Economic Commission for Latin America and the Caribbean (2006). Social Panorama of Latin America: 2006. Santiago, United Nations Publications.
- Economic Commission for Latin America and the Caribbean (2007). Social Indicators and Statistics Database (BADEINSO), Economic Commission for Latin America and the Caribbean.
- Gasparini, L., F. Gutiérrez, *et al.* (2005). Growth and Income Poverty in Latin America and the Caribbean: Evidence from Household Surveys. La Plata, CEDLAS, Universidad Nacional de La Plata.
- Handa, S. and B. B. Davis (2006). "The Experience of Conditional Cash Transfers in Latin America and the Caribbean," <u>Development Policy Review</u> 24 (5): 513-536, September 2006.

- Kalwij, A. and A. Verschoor (2007). "Not by growth alone: The role of the distribution of income in regional diversity in poverty reduction." <u>European Economic Review</u> 51(4): 805-829.
- Laos, E. H. (2000). "Distribución del ingreso y la pobreza en Mexico," in A. Alcalde, G. Bensusán, E. de la Garza, E. H. Laos, T. Rendón, and C. Salas, <u>Trabajo y Trabajadores en el México Contemporáneo</u>. México, Miguel Ángel Porrúa Press.
- Levy, S. (2006). Progress Against Poverty. Brookings, Washington, D.C.
- Székely, M., N. Lustig, M. Cumpa, and J. A. Mejía, (2000). "Do We Know How Much Poverty There Is?" Inter-American Development Bank Working Paper 437, Washington, D.C., December.
- Mancero, X. (2007). Personal Communication.
- Suarez Dillon Soares, S. and R. Guerreiro Osório, "The Impact of Relative Prices on Welfare and Inequality in Brazil, 1995-2005." International Poverty Centre, Working Paper 37, May 2007. URL: <a href="http://www.undp-povertycentre.org/ipcpublications.htm">http://www.undp-povertycentre.org/ipcpublications.htm</a>.
- United Nations Development Program (2004). Democracy in Latin America: Towards a Citizens' Democracy. New York, United Nations Development Program.
- Wade, R. H. (2004). "Is Globalization Reducing Poverty and Inequality?" World Development 32(4): 567-589.
- World Bank (2006). World Development Report 2006: Equity and Development. Washington, DC, The World Bank.
- World Bank (2007). World Development Indicators Online, World Bank.
- World Bank. (2007). "Poverty and Social Indicator Monitoring (MECOVI)." Retrieved February 9, 2007, 2007, from http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/LACEXT/EXTL ACREGTOPPOVANA/0,,contentMDK:20886217~pagePK:34004173~piPK:340 03707~theSitePK:841175,00.html.

The Global Development And Environment Institute (GDAE) is a research institute at Tufts University dedicated to promoting a better understanding of how societies can pursue their economic goals in an environmentally and socially sustainable manner. GDAE pursues its mission through original research, policy work, publication projects, curriculum development, conferences, and other activities. The "GDAE Working Papers" series presents substantive work-in-progress by GDAE-affiliated researchers. We welcome your comments, either by e-mail directly to the author or to G-DAE, Tufts University, 44 Teele Ave., Medford, MA 02155 USA; tel: 617-627-3530; fax: 617-627-2409; e-mail: gdae@tufts.edu;

website: http://ase.tufts.edu/gdae.

#### **Papers in this Series:**

- **00-01** Still Dead After All These Years: Interpreting the Failure of General Equilibrium Theory (Frank Ackerman, November 1999)
- **00-02** Economics in Context: The Need for a New Textbook (Neva R. Goodwin, Oleg I. Ananyin, Frank Ackerman and Thomas E. Weisskopf, February 1997)
- **00-03** Trade Liberalization and Pollution Intensive Industries in Developing Countries: A Partial Equilibrium Approach (Kevin Gallagher and Frank Ackerman, January 2000)
- **00-04** Basic Principles of Sustainable Development (Jonathan M. Harris, June 2000)
- **00-05** Getting the Prices Wrong: The Limits of Market-Based Environmental Policy (Frank Ackerman and Kevin Gallagher, September 2000)
- **00-06** Telling Other Stories: Heterodox Critiques of Neoclassical Micro Principles Texts (Steve Cohn, August 2000)
- **00-07** Trade Liberalization and Industrial Pollution in Mexico: Lessons for the FTAA (Kevin Gallagher, October 2000) (*Paper withdrawn- see www.ase.tufts.edu/gdae/ for details*)
- **00-08** Waste in the Inner City: Asset or Assault? (Frank Ackerman and Sumreen Mirza, June 2000)
- **01-01** Civil Economy and Civilized Economics: Essentials for Sustainable Development (Neva Goodwin, January 2001)
- **01-02** Mixed Signals: Market Incentives, Recycling and the Price Spike of 1995. (Frank Ackerman and Kevin Gallagher, January 2001)
- **01-03** Community Control in a Global Economy: Lessons from Mexico's Economic Integration Process (Tim Wise and Eliza Waters, February 2001)
- **01-04** Agriculture in a Global Perspective (Jonathan M. Harris, March 2001)
- **01-05** Better Principles: New Approaches to Teaching Introductory Economics (Neva R. Goodwin and Jonathan M. Harris, March 2001)
- **01-06** The \$6.1 Million Question (Frank Ackerman and Lisa Heinzerling, April 2002)
- **01-07** Dirt is in the Eye of the Beholder: The World Bank Air Pollution Intensities for Mexico (Francisco Aguayo, Kevin P. Gallagher, and Ana Citlalic González, July 2001)
- **01-08** Is NACEC a Model Trade and Environment Institution? Lessons from Mexican Industry (Kevin P. Gallagher, October 2001)
- **01-09** Macroeconomic Policy and Sustainability (Jonathan M. Harris, July 2001)

- **02-01** Economic Analysis in Environmental Reviews of Trade Agreements: Assessing the North American Experience. (Kevin Gallagher, Frank Ackerman, Luke Ney, April 2002)
- **03-01** Read My Lips: More New Tax Cuts—The Distributional Impacts of Repealing Dividend Taxation (Brian Roach, February 2003)
- **03-02** Macroeconomics for the 21<sup>st</sup> Century (Neva R. Goodwin, February 2003)
- **03-03** Reconciling Growth and the Environment (Jonathan M. Harris and Neva R. Goodwin, March 2003)
- **03-04** Current Economic Conditions in Myanmar and Options for Sustainable Growth (David Dapice, May 2003)
- **03-05** Economic Reform, Energy, and Development: The Case of Mexican Manufacturing (Francisco Aguayo and Kevin P. Gallagher, July 2003)
- **03-06** Free Trade, Corn, and the Environment: Environmental Impacts of US-Mexico Corn Trade Under NAFTA
- **03-07** Five Kinds of Capital: Useful Concepts for Sustainable Development (Neva R. Goodwin, September 2003)
- **03-08** International Trade and Air Pollution: The Economic Costs of Air Emissions from Waterborne Commerce Vessels in the United States (Kevin P. Gallagher and Robin Taylor, September 2003)
- **03-09** Costs of Preventable Childhood Illness: The Price We Pay for Pollution (Rachel Massey and Frank Ackerman, September 2003)
- **03-10** Progressive and Regressive Taxation in the United States: Who's Really Paying (and Not Paying) their Fair Share? (Brian Roach, October 2003)
- **03-11** Clocks, Creation, and Clarity: Insights on Ethics and Economics from a Feminist Perspective (Julie A. Nelson, October 2003)
- **04-01** Beyond Small-Is-Beautiful: A Buddhist and Feminist Analysis of Ethics and Business (Julie A. Nelson, January 2004)
- **04-02** The Paradox of Agricultural Subsidies: Measurement Issues, Agricultural Dumping, and Policy Reform (Timothy A. Wise, February 2004)
- **04-03** Is Economics a Natural Science? (Julie Nelson, March 2004)
- **05-01** The Shrinking Gains from Trade: A Critical Assessment of Doha Round Projections (Frank Ackerman, October 2005)
- **05-02** Understanding the Farm Problem: Six Common Errors in Presenting Farm Statistics (Timothy A. Wise, March 2005)
- **05-03** Securing Social Security: Sensitivity to Economic Assumptions and Analysis of Policy Options (Brian Roach and Frank Ackerman, May 2005)
- **05-04** Rationality and Humanity: A View from Feminist Economics (Julie A. Nelson, May 2005)
- **05-05** Teaching Ecological and Feminist Economics in the Principles Course (Julie A. Nelson and Neva Goodwin, June 2005)
- **05-06** Policy Space for Development in the WTO and Beyond: The Case of Intellectual Property Rights (Ken Shadlen, November 2005)
- **05-07** Identifying the Real Winners from U.S. Agricultural Policies (Timothy A. Wise, December 2005)
- **06-01** The Missing Links between Foreign Investment and Development: Lessons from Costa Rica and Mexico (Eva A. Paus and Kevin P. Gallagher, February 2006)
- **06-02** The Unbearable Lightness of Regulatory Costs (Frank Ackerman, February 2006)

- **06-03** Feeding the Factory Farm: Implicit Subsidies to the Broiler Chicken Industry (Elanor Starmer, Aimee Witteman and Timothy A. Wise, June 2006)
- **06-04** Ethics and International Debt: A View from Feminist Economics (Julie A. Nelson, August 2006)
- **06-05** Can Climate Change Save Lives? (Frank Ackerman and Elizabeth Stanton, September 2006)
- **06-06** European Chemical Policy and the United States: The Impacts of REACH (Frank Ackerman, Elizabeth Stanton and Rachel Massey, September 2006)
- **06-07** The Economics of Inaction on Climate Change: A Sensitivity Analysis (Frank Ackerman and Ian J. Finlayson, October 2006)
- **07-01** Policy Space for Mexican Maize: Protecting Agro-biodiversity by Promoting Rural Livelihoods (Timothy A. Wise, February 2007)
- **07-02** Declining Poverty in Latin America? A Critical Analysis of New Estimates by International Institutions (Ann Helwege and Melissa B.L. Birch, September 2007)