

Regularizing and Augmenting the World Bank Poverty Rates

Joseph Connors

Working Paper no. 14

Department of Economics
Wake Forest University
connorjs@wfu.edu

October 27, 2011

Abstract

This paper describes a method to regularize the World Bank extreme and moderate poverty rates to five-year intervals and fill in missing values where appropriate. The World Bank poverty rates are estimated using consumption and income data from household surveys conducted irregularly in developing countries. This irregularity carries through to the poverty data and complicates statistical analysis. By regularizing the data using the method described here, more of the information in the poverty dataset is used in statistical analysis. The result is a poverty dataset that covers almost the entire developing world. Analysis of the data indicates that the Millennium Development Goal of halving the extreme poverty rate between 1990 and 2015 will be achieved. However, the large decline in global poverty is due to reductions in Asia during 1980-2005. Sub-Saharan Africa had very little reductions in poverty rates during this period.

1. Introduction

The literature on why some countries are poor and others rich has focused exclusively on growth and ignored poverty. This is largely due to the abundance of income and growth data and lack of poverty data. The World Bank has attempted to fill this void with the latest release of their poverty rates. While these rates are better than previous poverty measures, they remain difficult to use in empirical analysis. The aim of this paper is to supplement the World Bank poverty rates in order to facilitate their use in empirical analysis.

The World Bank extreme and moderate poverty rates are the most commonly used measures of global poverty. They are defined as the percentage of a country's population living on \$1.25 and \$2 per day, respectively, in 2005 international dollars. The rates are derived from household surveys making them reliable measures of the income of the poor. However, a drawback of the survey data is that it is irregular and often contains large gaps in the data due to the difficulty of conducting surveys in developing countries. This complicates statistical analysis. This paper describes a method to regularize and augment the World Bank poverty rates in order to make them more comprehensive and easier to use in empirical analysis. In addition, this paper presents the completed poverty dataset for use in empirical analysis.

Preliminary analysis of the extreme and moderate poverty rates indicates that poverty in the developing world has declined substantially. The Millennium Development Goal of halving the extreme poverty rate between 1990 and 2015 will most likely be achieved a few years early. However, the aggregate numbers hide differences in poverty trends across regions. Asia had significant reductions in poverty while sub-Saharan Africa's poverty rates hardly changed. Understanding these regional differences can guide future analysis.

2. The Latest Poverty Rates: Irregularity and Missing Values

The latest World Bank extreme and moderate poverty rates are more comprehensive than previous poverty estimates. They are also more accurate.¹ The World Bank extreme and moderate poverty rates are derived using consumption and income data from household surveys. These surveys are conducted at various times in developing countries resulting in irregularly reported poverty rates during 1980-2005. This irregularity complicates regression analysis with data reported at five-year intervals. Much of the information contained in the poverty rates is not used in this analysis because the poverty rates are not aligned with the other data. Table 2.1 contains an example of the irregularity of the poverty data. The table lists the extreme poverty rate for fifteen developing countries during 1990-2000. Statistical analysis with data at five-year intervals ending in zero or five would use only four of the thirty-three observations shown in table 2.1. Statistical techniques that regularize the poverty data at five-year intervals allow more of the information to be used in regression analysis.

Conducting household surveys in developing countries is difficult and often results in large delays between surveys. Consequently, some countries are missing poverty rates for periods of five years or more. See table 2.1. Some of these missing poverty rates can be estimated using under-five mortality data. The poor in developing countries suffer from inadequate nutrition

¹See Chen and Ravallion (2008) for a description of the latest poverty rates.

and little or no access to medical treatment. Consequently, these countries have much higher mortality rates resulting in a high correlation between the extreme and moderate poverty rates and the under-five mortality rate.

Table 2.1: An example of the irregularity of the poverty data: World Bank extreme poverty rate for selected countries, 1990-2000

Country	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Gambia, The									66.7		
Georgia							4.5			8.7	
Ghana			51.1						39.1		
Guatemala									15.7		13.1
Guinea		92.6			36.8						
Guinea-Bissau		41.3		52.1							
Guyana				5.8					7.7		
Haiti											
Honduras	43.5		33.3		28.3			15.6		14.4	
Hungary				2.0					2.0	2.0	
India					49.4						
Iran, Islamic Rep.	3.9				2.0				2.0		
Jamaica	2.0			3.8			2.0			2.0	
Jordan			2.8					2.0			
Kazakhstan				4.2			5.0				

The following section describes the techniques used to regularize the extreme and moderate poverty rates at five-year intervals ending in zero or five and fill in missing values where appropriate.

3. Preparation of the World Bank Extreme and Moderate Poverty Rates for Use in Statistical Analysis

Statistical procedures were used to adjust the World Bank poverty rates and to derive estimates at five-year intervals during 1980-2005. Adjustment of the data comprises two parts. The first is the adjustment of the data to five-year intervals while the second is a regression analysis to estimate missing values. Appendix A provides these estimates for the 128 countries for which these poverty rates could be derived.

3.1 Part 1: Adjusting the World Bank Poverty Rates at Five-Year Intervals and Filling in Several Missing Values

Adjustment of the World Bank extreme and moderate poverty rates to five-year intervals involved five steps.

1. When the World Bank data were available for a year ending in zero or five for a country, these poverty rate figures were used. There were 101 observations for each poverty rate that

fit this category during 1980-2005, which is 15 percent of the total observations listed in appendix A.

2. If the World Bank did not provide the poverty rate figures for a country in a zero or five year, but there was a value in each of the adjacent years, the average of the adjacent years was used as the value for the missing year ending in zero or five. For example, the 2000 data for Brazil were unavailable, but the data were available in both 1999 and 2001. Brazil's extreme poverty rate was 11.2 in 1999 and 11.0 in 2001. Thus, the 2000 figure for Brazil's extreme poverty rate was the average of these two figures, 11.1. There were 10 observations for each poverty rate that fit this category during 1980-2005, which is roughly 1 percent of the total observations.

3. If a country had a value for only one adjacent year, that value was used for the missing year ending in zero or five. Poverty rates seldom change much from one year to the next. Therefore, the figure for an adjacent year will nearly always be a good estimate for the missing value. For example, Botswana had an extreme poverty rate of 31.2 in 1994 but no data were available for 1995, 1996, or 1997. Thus, the 1994 figure of 31.2 was used as the value for Botswana's extreme poverty rate in 1995. There were 3 observations for each poverty rate that fit this category during 1980-2005, which is less than 1 percent of the total observations.

4. If none of the above scenarios applied to a country during a specific five-year period, but it still had poverty data in a five-year window centered on the year ending in zero or five, the value for that period became the average of the values in the five-year window. For example, Ghana had an extreme poverty rate of 50.6 in 1988, 49.4 in 1989, no values for 1990 or 1991, and 51.1 in 1992. Therefore, Ghana's extreme poverty rate for 1990 became the average of the values over the five-year window centered on 1990 (i.e. 1988-1992), which was 50.3. There were 245 observations for each poverty rate that fit this category during 1980-2005, which is 36 percent of the total observations.

5. In cases where a gap of a decade existed after the above procedures were used, the per capita real GDP data were used to fill in the middle year in cases where the income data and poverty rates moved in opposite directions. This was the case for 15 countries. Again, Ghana can be used to illustrate the procedure. Ghana had a poverty rate in 1990 and 2000, but was missing a value for 1995. The per capita real GDP data for Ghana were available for 1990, 1995, and 2000 and the pattern of these figures was used to adjust and predict the poverty rate value for the missing middle year, 1995. Ghana had an extreme poverty rate of 50.3 in 1990 and 39.1 in 2000. Ghana's per capita GDP (measured in 2005 constant international dollars) increased from \$861 in 1990 to \$925 in 1995 and \$1,015 in 2000. Thus, there was an upward trend in per capita GDP and a downward trend in poverty over this period so the per capita GDP figures were used to estimate the missing poverty rate value. Equation 1 was used to generate the missing poverty values under these conditions.

$$poverty_t = poverty_{t-5} + (poverty_{t+5} - poverty_{t-5}) \frac{GDP_t - GDP_{t-5}}{GDP_{t+5} - GDP_{t-5}} \quad (1)$$

The variable $poverty_t$ is the missing poverty rate, $poverty_{t-5}$ is the poverty rate five years prior to the missing rate, $poverty_{t+5}$ is the poverty rate five years after the missing rate, GDP_t is the per capita real GDP for the same year of the missing poverty rate, GDP_{t-5} is the per capita real GDP five years prior to the missing rate, and GDP_{t+5} is the per capita

real GDP five years after the missing rate.

Equation 1 uses per capita real GDP as a scale factor to predict the missing poverty value. The GDP ratio in the last term of the equation represents the proportion of the increase (decrease) of GDP that took place in the first five years of the decade. This is then multiplied by the decline (rise) in poverty over the decade. Lastly, this change in poverty is added to the poverty rate at the start of the decade. There were 14 observations for each poverty rate that fit this category during 1980-2005, which is 2 percent of the total observations.

The methodology described in this first part, steps 1-5, was used to derive the extreme and moderate poverty rates for 373 country-year observations, which comprised 55 percent of the total. At least one observation was present for 115 countries and at least three observations for 79 countries over the period 1980-2005.

3.2 Part 2: Regression Analysis to Fill in Missing Poverty Values

The log of per capita real GDP and the under-five mortality rate are major determinants of both the extreme and moderate poverty rates. Using the 373 observations derived in the previous section, the extreme poverty rate was regressed on the log of per capita real GDP and the under-five mortality rate. The R-squared value for this equation was 0.76. When the same equation was run with the moderate poverty rate as the dependent variable, the R-squared value was 0.80. These high R-squared values indicate that taken together, the per capita real GDP and under-five mortality rate are excellent predictors of both the extreme and moderate poverty rates.

The per capita real GDP and under-five mortality data from the World Bank, *World Development Indicators*, are available for countries and years beyond which the procedures of the previous section could be used to derive the poverty rates. These data can be used to estimate the poverty rates for a broader range of countries and years. The 373 observations were used to estimate the following regression:

$$poverty_{it} = \log(GDP_{it}) + u5Mort_{it} + dSSaharanAfrica + dOutlierCountries \quad (2)$$

The variable $poverty_{it}$ is the poverty rate of country i in time period t , $\log(GDP_{it})$ is the log of per capita real GDP of country i in time period t , $u5Mort_{it}$ is the under-five mortality rate of country i in time period t , $dSSaharanAfrica$ is a dummy for sub-Saharan Africa, and $dOutlierCountries$ is a dummy for several outlier countries. A country was considered an outlier if its dummy variable was significant at the 90 percent level or more in the above regression. The R-squared value for this equation was 0.90 when the extreme poverty rate was the dependent variable and 0.91 when the dependent variable was the moderate poverty rate. The country data for per capita real GDP and under-five mortality rate along with the dummies (if they applied) were then inserted into the regression equations for the missing years and used to predict the country's extreme and moderate poverty rates for those years. This methodology was used to estimate a country's poverty rate when it could not be derived for a specific year by steps 1-5 in section 3.1 above. In addition to the 115 countries for which data for at least one year were available from the World Bank, this regression procedure was

used to estimate the extreme and moderate poverty rates for another 13 countries with a population of more than 1 million.²

The World Bank limits the poverty rate at 2 percent for rates that fall below this level. This convention was used here when the predicted poverty rates were below 2 percent. Similarly, predicted poverty rates larger than 99 percent were limited to that figure.

In total, it was possible to estimate the extreme and moderate poverty rate figures for 683 country-year observations comprising 128 countries. Appendix A provides these estimates for the period 1980-2005 at five-year intervals. The bold values in the table are the actual poverty rates as reported by the World Bank after adjustment by the procedures explained in section 3.1 steps 1-5. The 310 non-bold values were calculated by the regression methodology explained here. This methodology accounted for 45 percent of the poverty values.

With these adjustments, the World Bank extreme and moderate poverty rates are now more comprehensive and easier to use for statistical analysis than the original World Bank figures. The coverage of the world's population of the original poverty rates was 11 percent in 2000 and 59 percent in 2005. The adjustments described here increased the coverage to 84 percent in 2000 and 85 percent in 2005. When the high-income countries are included, the coverage increases to 99 percent for both 2000 and 2005, which indicates that the adjusted poverty rates encompass nearly the entire developing world. In the sections that follow all references to the World Bank extreme and moderate poverty rates are to the adjusted World Bank poverty dataset described here.

4. Poverty: Global and Regional Changes, 1980-2005

Figures 4.1 and 4.2 present the World Bank extreme and moderate poverty rates for all countries and for developing countries during 1980-2005. The figures for all countries include twenty-seven high-income countries (and one territory) from Western Europe and North America along with Australia, Japan, and New Zealand as well as the 128 developing countries listed in appendix A. In keeping with the World Bank convention regarding low poverty rate estimates, these high income countries were assigned a poverty rate of 2 percent to compute the world average for the extreme and moderate poverty rates. The average poverty rates in these figures, and in the table that follows, are calculated by weighting a country's poverty rate by its population in each year.

Figure 4.1 shows the extreme poverty rate for all countries and for developing countries during 1980-2005 at five-year intervals. The extreme poverty rate for the developing world fell from 58.4 percent in 1980 to 25.1 percent in 2005. When the high-income countries are included, the extreme poverty rate exhibits a similar decline. The extreme poverty rate for all countries fell from 47.5 percent in 1980 to 21.8 percent in 2005. These data indicate that the extreme poverty rate fell by more than half during the period.

²These countries are: Eritrea, Indonesia, Kuwait, Lebanon, Mauritius, Myanmar, Oman, Saudi Arabia, Singapore, Sudan, Syria, Taiwan, and the United Arab Emirates.

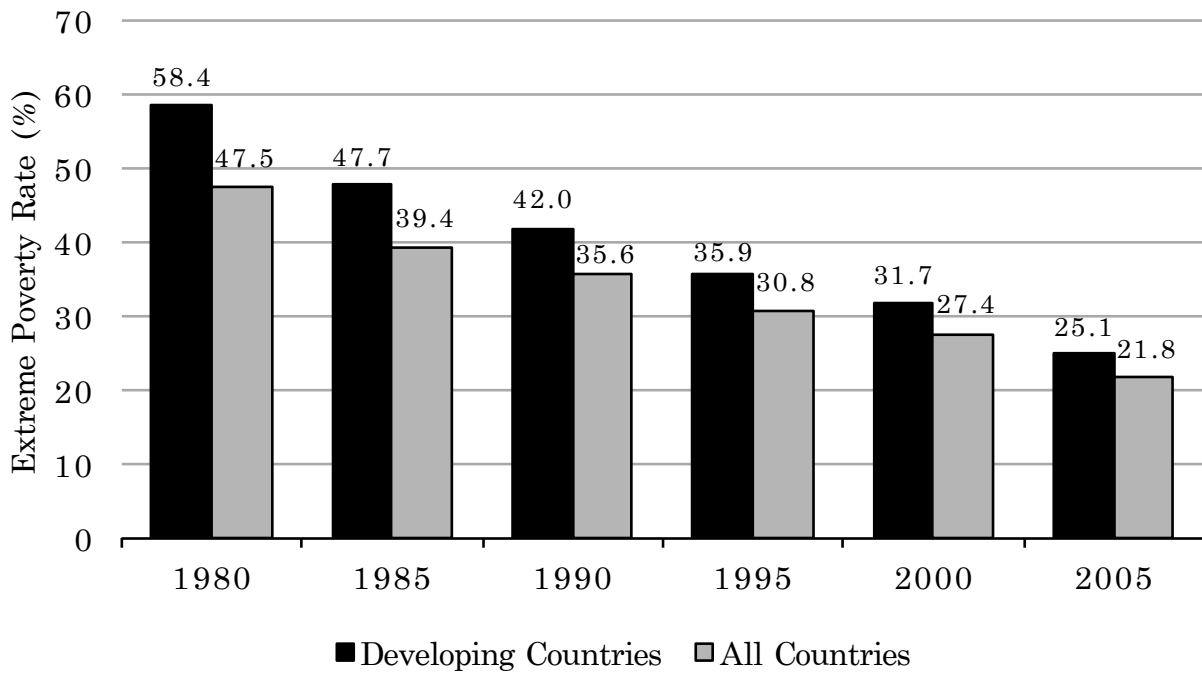


Figure 4.1: World Bank extreme poverty rate (\$1.25 per day, 2005 international dollars) of the world, 1980-2005

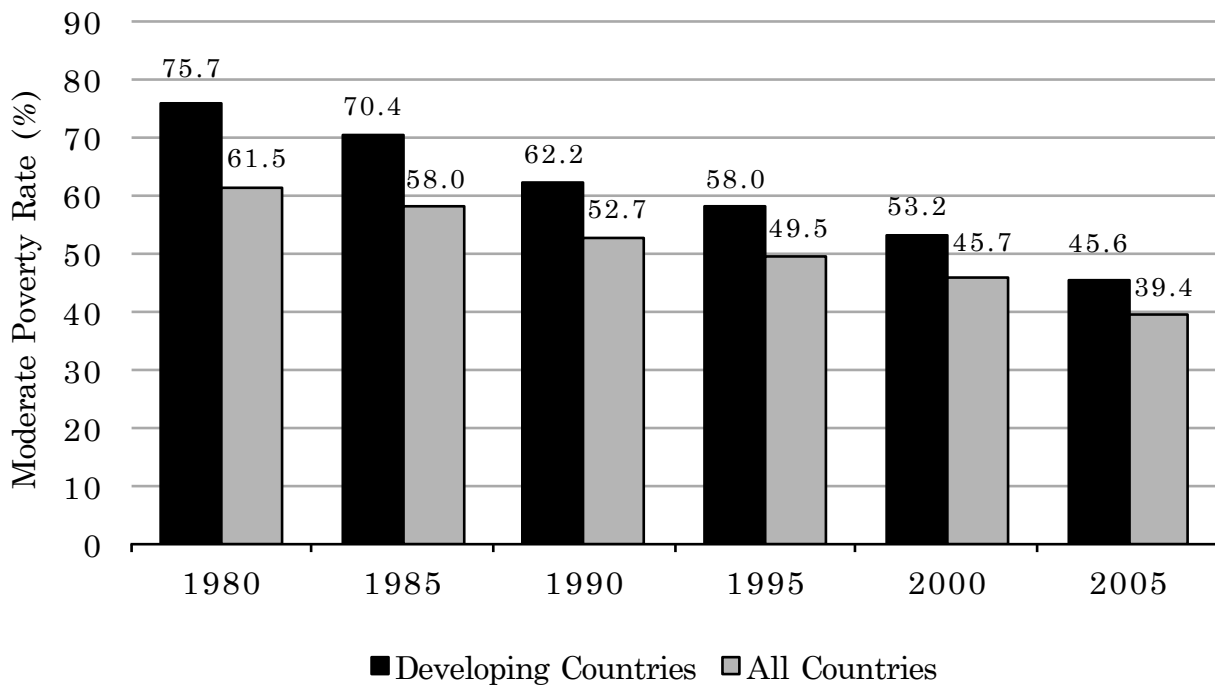


Figure 4.2: World Bank moderate poverty rate (\$2 per day, 2005 international dollars) of the world, 1980-2005

Figure 4.1 also indicates that the Millennium Development Goal of halving the extreme poverty rate in the developing world between 1990 and 2015 has nearly been achieved. The extreme poverty rate for the developing world was 42 percent in 1990. This corresponds to a target rate of 21 percent or lower by 2015. In 2005, the extreme poverty rate was just 4 percentage points above this target. And, if trends continue, the extreme poverty rate will be below 21 percent by 2015, if not before.

Figure 4.2 shows the moderate poverty rate during 1980-2005. Moderate poverty in the developing world fell by 30 percentage points over the period from 75.7 percent in 1980 to 45.6 percent in 2005. Including the high-income countries, the moderate poverty rate declined from 61.5 percent in 1980 to 39.4 percent in 2005. These figures highlight the significant declines in poverty that occurred during the period. While three-fourths of the developing world lived in moderate poverty in 1980, less than half do today.

Table 4.1: World Bank mean extreme and moderate poverty rates for sub-Saharan Africa, Latin America, Asia, China, and India, 1980-2005

Extreme poverty rate (% of population living on \$1.25 per day)							
	No. of						
Country/Region	countries	1980	1985	1990	1995	2000	2005
Sub-Saharan Africa	39	60.8	58.1	60.3	57.7	57.1	51.3
Latin America	24	15.6	14.7	11.2	9.7	10.9	8.1
Asia	15	69.1	55.7	53.5	43.7	36.4	26.9
China		84.0	61.7	60.2	45.0	32.0	15.9
India		65.9	55.5	53.6	49.4	46.5	41.6
Asia, omitting China and India	13	47.1	46.0	42.6	34.8	30.9	24.7

Moderate poverty rate (% of population living on \$2 per day)							
	No. of						
Country/Region	countries	1980	1985	1990	1995	2000	2005
Sub-Saharan Africa	39	77.3	77.3	78.1	77.4	76.1	72.3
Latin America	24	25.5	26.8	21.3	20.6	21.4	17.0
Asia	15	88.3	82.2	79.2	71.3	63.4	52.5
China		97.8	88.3	84.6	71.8	56.3	36.3
India		89.0	84.8	83.8	81.7	79.4	75.6
Asia, omitting China and India	13	71.1	69.2	65.0	57.8	54.6	48.0

Figures 4.1 and 4.2 indicate remarkable reductions in global poverty occurred during the last quarter century. However, these aggregate numbers hide differences across regions. Table 4.1 lists the average World Bank extreme and moderate poverty rates for various regions and countries during 1980-2005. Only Countries with data available continuously for years ending in either zero or five are included in this table. By far, Asia had the largest reductions over the twenty-five year period as the extreme poverty rate fell from 69.1

percent to 26.9 percent and the moderate poverty rate fell from 88.3 percent to 52.5 percent. These reductions were largely driven by China and India as these two countries account for half of the extreme poverty rate reduction over the period and two-fifths of the moderate poverty rate reductions. Latin America had much lower poverty rates than other regions and achieved consistent reductions over the twenty-five year period. The extreme poverty rate fell from 15.6 percent to 8.1 percent and the moderate poverty rate fell from 25.5 percent to 17.0 percent. In contrast to the reductions in Asia and Latin America, table 4.1 indicates that sub-Saharan Africa had very little reductions in poverty rates over the twenty-five year period, with reductions occurring only in the last five years. The extreme poverty rate for sub-Saharan Africa was 60.8 percent in 1980 falling slightly in 1985 and increasing back to 60.3 percent in 1990 before falling to 51.3 percent by 2005. The moderate poverty rate in sub-Saharan Africa exhibits a similar trend as it began the 1980s at 77.3 percent, increased to 78.1 percent in 1990 before dropping to 72.3 percent by 2005.

5. Conclusion

The World Bank extreme and moderate poverty rates are generated from irregularly conducted household surveys, which complicates statistical analysis. This paper describes a method to regularize the data to five-year intervals during 1980-2005 and fill in missing values where appropriate. The result is an improved poverty database that covers almost the entire developing world which can be used readily for empirical analysis.

The poverty rates indicate that the Millennium Development Goal of halving the percentage of people who live in extreme poverty between 1990 and 2015 will most likely be achieved. However, the achievement of this goal is primarily a result of the dramatic poverty reductions in China and India. The poverty reductions in Latin America also contributed, but had less impact due to a smaller population size relative to Asia. Both the extreme and moderate poverty rates for sub-Saharan Africa fell very little over the period with small declines occurring in the latter five years. This indicates that while Asia and Latin America made significant strides toward eliminating extreme and moderate poverty, obstacles remain for sub-Saharan Africa.

Appendix A

Table A.1: Extreme (\$1.25 per day) and moderate (\$2 per day) poverty rate in 2005 international dollars by country, 1980-2005

	Percentage of Population Living on \$1.25 per Day or Less						Percentage of Population Living on \$2 per Day or Less					
	1980	1985	1990	1995	2000	2005	1980	1985	1990	1995	2000	2005
Albania				2.0	2.0	2.0				6.5	8.7	7.8
Algeria	25.2	18.1	6.6	6.8	10.9	8.5	31.7	25.1	23.8	23.6	20.4	16.8
Angola	64.0	63.5	61.9	61.2	54.3	44.2	70.4	69.5	67.9	71.3	70.2	52.0
Argentina	5.6	2.0	2.0	2.0	6.0	4.5	10.9	2.0	3.2	7.0	14.3	11.3
Armenia				17.5	16.5	10.6				38.9	47.7	43.4
Azerbaijan				15.6	6.3	2.0				39.3	27.1	2.0
Bangladesh	77.5	72.2	66.8	59.4	57.8	49.6	99.0	99.0	92.5	87.4	85.4	81.3
Belarus			2.0	2.3	2.0	2.0			2.0	11.1	2.0	2.0
Benin	65.2	62.6	61.3	57.3	53.4	47.3	81.6	79.0	79.1	75.6	71.3	75.3
Bhutan	56.1	48.7	39.9	33.7	28.5	26.2	76.8	68.5	56.7	49.0	42.6	49.5
Bolivia	37.0	34.5	4.0	18.9	23.8	19.6	46.7	46.7	17.2	29.9	34.9	30.3
Bosnia and Herzegovina				14.6	2.0	2.0				25.0	2.0	2.0
Botswana	42.0	35.6	31.9	31.2	32.3	23.1	65.1	54.7	50.2	49.4	46.0	36.3
Brazil	17.1	17.5	15.5	10.5	11.1	7.8	31.1	31.5	27.8	21.9	22.6	18.3
Bulgaria			2.0	2.0	2.6	2.0			2.0	2.2	7.8	2.4
Burkina Faso	74.7	71.0	68.3	71.2	70.0	56.5	94.8	90.9	88.7	85.8	87.6	81.2
Burundi	72.3	70.4	84.2	85.7	86.4	81.3	97.1	94.7	95.2	95.3	95.4	93.4
Cambodia				48.6	45.8	40.2				77.8	74.6	68.2
Cameroon	52.8	45.6	46.9	51.5	32.8	49.1	65.3	56.3	60.2	74.4	57.7	62.6
Cape Verde	43.0	38.3	36.0	33.1	20.6	27.9	62.9	55.9	53.4	49.7	40.2	42.6
Central African Republic	62.9	61.2	61.6	82.8	64.9	62.4	81.5	80.5	82.0	90.7	85.6	81.9
Chad	71.3	65.9	64.6	65.3	66.3	61.9	90.3	82.8	82.5	83.6	84.9	83.3
Chile	12.3	10.5	4.4	2.3	2.0	2.0	22.9	23.4	13.6	9.1	6.0	3.9
China	84.0	61.7	60.2	45.0	32.0	15.9	97.8	88.3	84.6	71.8	56.3	36.3
Colombia	13.7	12.3	9.5	11.2	16.8	15.7	24.4	23.1	19.4	23.3	29.1	27.1
Comoros	56.7	51.9	49.1	46.7	44.3	46.1	74.0	69.2	67.5	66.3	64.6	65.0
Congo, Dem. Rep.	69.0	68.4	69.1	73.2	74.1	59.2	88.8	88.8	91.0	99.0	99.0	79.5
Congo, Rep.	37.9	33.6	36.1	38.3	39.5	54.1	49.3	42.4	46.1	49.1	50.2	74.4
Costa Rica	21.4	10.4	9.2	7.5	4.4	2.4	35.7	21.5	18.7	16.4	11.5	8.6
Cote d'Ivoire	16.9	9.5	13.8	21.1	23.7	15.5	34.9	23.9	35.1	47.9	47.9	38.9

Table A.1 – continued

	Percentage of Population Living on \$1.25 per Day or Less						Percentage of Population Living on \$2 per Day or Less					
	1980	1985	1990	1995	2000	2005	1980	1985	1990	1995	2000	2005
Croatia			2.0	2.0	2.0	2.0			2.0	2.0	2.0	2.0
Czech Republic			2.0	2.0	2.0	2.0			2.0	2.0	2.0	2.0
Djibouti			11.7	4.8	18.8	8.8			24.4	15.1	41.2	26.1
Dominican Republic	24.4	16.4	8.4	5.9	4.4	5.0	37.9	30.4	20.8	15.7	12.4	15.1
Ecuador	20.2	12.2	14.0	15.9	14.9	9.8	28.6	22.3	24.0	28.2	27.7	20.4
Egypt, Arab Rep.	25.5	14.8	4.5	2.5	2.0	2.0	46.2	35.3	27.6	26.3	19.3	18.4
El Salvador	26.1	22.2	15.9	12.7	12.8	11.0	36.1	34.7	24.7	25.2	22.2	20.5
Eritrea				54.2	51.1	48.7				76.6	75.1	74.0
Estonia			2.0	2.0	2.0	2.0			2.0	2.0	2.6	2.0
Ethiopia	66.2	71.9	70.7	60.5	55.6	39.0	89.9	95.2	93.4	84.6	86.4	77.5
Gabon						4.8						19.6
Gambia, The	65.7	59.3	55.8	56.0	66.7	34.3	82.4	77.2	74.3	75.3	82.0	56.7
Georgia				4.5	11.9	13.4				13.1	28.7	30.4
Ghana	56.4	56.9	50.3	45.7	39.1	30.0	75.9	78.4	78.1	72.0	63.3	53.6
Guatemala	39.1	52.5	39.3	25.6	13.1	11.7	51.6	70.4	55.8	40.6	26.8	24.3
Guinea	77.8	74.5	92.6	36.8	61.6	70.1	94.1	91.7	98.4	63.8	79.6	87.2
Guinea-Bissau			41.3	52.1	48.8	45.7			58.5	75.7	77.9	72.1
Guyana	12.8	13.3	12.9	5.8	7.7	3.9	21.9	24.5	25.1	15.0	16.8	12.6
Haiti	48.2	44.2	41.5	43.2	54.9	34.7	61.7	60.1	58.9	63.9	72.1	57.8
Honduras	27.9	24.4	43.5	21.9	14.4	22.2	42.3	40.1	61.6	37.3	26.8	34.8
Hungary		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0
India	65.9	55.5	53.6	49.4	46.5	41.6	89.0	84.8	83.8	81.7	79.4	75.6
Indonesia	39.1	34.7	29.2	22.2	19.5	16.0	59.0	53.6	46.5	37.6	35.8	31.2
Iran, Islamic Rep.	14.6	4.2	3.9	2.0	2.0	2.0	20.3	13.8	13.1	8.2	8.3	8.0
Jamaica	6.9	6.4	2.0	2.9	2.0	2.0	14.8	15.0	8.3	11.5	7.5	5.8
Jordan	6.4	2.0	2.8	2.0	2.0	2.0	12.3	2.0	14.9	11.5	11.0	7.2
Kazakhstan			2.0	4.6	3.6	3.1			2.0	18.1	15.0	17.2
Kenya	28.2	26.4	38.4	24.1	29.2	19.7	49.7	48.9	59.3	48.2	51.2	39.9
Korea, Rep.	8.3		2.0	2.0	2.0	2.0	20.0		5.5	2.0	2.0	2.0
Kuwait	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Kyrgyz Republic			2.0	18.6	27.1	21.8			2.0	30.1	56.4	51.9
Lao PDR		53.3	55.7	49.3	44.0	28.6		74.1	84.8	79.9	76.8	47.4
Latvia			2.0	2.0	2.0	2.0			2.0	2.9	3.0	2.0
Lebanon			11.2	6.6	5.8	4.2			22.2	14.1	13.0	10.3
Lesotho	55.9	44.4	49.0	47.6	47.1	43.4	78.2	62.2	70.3	61.1	66.0	62.2

Table A.1 – continued

	Percentage of Population Living on \$1.25 per Day or Less						Percentage of Population Living on \$2 per Day or Less					
	1980	1985	1990	1995	2000	2005	1980	1985	1990	1995	2000	2005
Liberia	64.9	64.3	72.0	81.5	66.3	83.7	76.3	78.4	95.5	99.0	92.0	94.8
Lithuania			2.0	2.7	2.0	2.0			2.0	8.6	2.0	2.0
Macedonia, FYR				7.5	2.9	2.0				17.1	10.2	3.2
Madagascar	85.9	80.1	79.3	72.5	79.3	67.8	94.3	93.2	92.7	88.4	90.9	89.6
Malawi	94.8	93.0	89.4	87.3	83.1	73.9	99.0	99.0	99.0	99.0	93.5	90.4
Malaysia	12.7	2.8	2.0	2.1	2.0	2.0	24.2	12.1	11.1	11.0	9.6	7.8
Mali	81.5	79.2	75.0	86.1	61.2	51.4	97.1	97.7	93.6	93.9	82.0	77.1
Mauritania	35.7	41.3	32.4	33.1	21.2	30.2	58.0	64.6	56.2	58.4	44.1	53.8
Mauritius	25.3	22.0	18.1	15.8	13.4	11.2	37.0	32.6	26.2	22.3	18.2	14.8
Mexico	11.1	12.8	6.1	5.2	4.8	2.4	15.1	28.5	16.0	16.1	13.7	5.9
Moldova			16.1	15.1	30.6	8.1			44.6	36.8	56.8	28.9
Mongolia		32.4	29.3	18.8	24.8	22.4		48.8	45.3	43.5	53.6	49.0
Morocco	18.5	8.4	2.5	5.2	6.5	2.5	34.0	28.6	15.9	21.9	24.4	14.0
Mozambique	77.9	78.3	73.2	81.3	78.8	74.7	99.0	99.0	98.7	92.9	91.8	90.0
Myanmar	53.4	50.1	53.3	49.1	44.9	40.3	84.1	80.0	84.7	79.0	72.4	64.7
Namibia	33.0	33.2	33.3	49.1	34.2	29.1	41.2	42.8	43.9	62.2	43.2	37.4
Nepal	83.0	78.1	74.0	68.4	59.9	55.1	99.0	93.4	91.1	88.1	81.4	77.6
Nicaragua	30.1	26.5	26.5	32.5	20.6	15.8	44.4	42.5	45.3	49.2	38.0	31.8
Niger	82.8	85.0	72.8	78.2	74.5	65.9	97.9	99.0	91.1	91.5	96.1	85.6
Nigeria	63.2	53.9	65.2	58.9	61.5	64.4	75.2	76.9	78.8	78.1	75.8	83.9
Oman	15.1	3.8	2.0	2.0	2.0	2.0	19.6	5.6	3.4	2.0	2.0	2.0
Pakistan	54.9	66.5	64.7	36.0	32.5	22.6	89.1	89.1	88.2	73.5	70.2	60.3
Panama	7.0	8.8	16.9	11.5	11.5	9.3	17.8	17.3	26.8	19.7	20.0	17.9
Papua New Guinea	33.7	32.5	31.6	35.8	27.3	26.4	50.8	50.4	50.5	57.4	45.5	45.2
Paraguay	17.1	16.1	5.9	12.7	17.1	9.3	29.5	29.3	19.4	21.8	27.3	18.4
Peru	14.8	2.0	2.0	7.2	12.6	8.2	20.3	5.2	5.2	18.4	24.4	19.4
Philippines	31.7	34.9	30.6	24.9	22.5	22.3	54.5	61.9	56.1	48.2	44.8	44.4
Poland		2.0	2.0	3.1	2.0	2.0		2.0	2.0	9.9	2.0	2.0
Romania			2.0	5.0	3.7	2.0			2.0	23.2	17.2	3.4
Russian Federation			2.0	3.2	2.1	2.0			3.9	7.9	7.1	2.0
Rwanda	67.8	63.3	67.0	68.4	76.6	63.9	87.2	88.4	87.9	91.1	90.3	84.2
Saudi Arabia	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Senegal	62.7	56.0	65.8	54.1	44.2	33.5	77.1	71.7	81.5	79.4	71.3	60.3
Sierra Leone	62.5	59.6	62.8	61.2	62.5	53.4	76.9	75.2	75.0	80.4	84.2	76.1
Singapore	2.0		2.0		2.0	2.0	2.0		2.0		2.0	2.0

Table A.1 – continued

	Percentage of Population Living on \$1.25 per Day or Less						Percentage of Population Living on \$2 per Day or Less					
	1980	1985	1990	1995	2000	2005	1980	1985	1990	1995	2000	2005
Slovak Republic			2.0	2.0	2.0	2.0			2.0	2.0	2.3	2.0
Slovenia		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0
South Africa	25.8	23.9	22.4	21.4	26.2	21.7	41.5	40.6	39.7	39.9	42.9	38.3
Sri Lanka	25.2	20.0	15.0	16.3	14.0	12.5	46.3	51.6	49.5	46.7	39.7	27.3
St. Lucia	13.4	11.5	5.8	20.9	3.5	2.9	26.6	24.7	14.8	40.6	11.4	9.9
Sudan	53.2	53.5	51.7	49.7	47.0	44.3	72.3	73.9	71.4	68.5	64.4	60.3
Suriname	12.6	13.6	13.4	13.1	15.5	7.8	20.9	23.5	23.9	24.1	27.2	16.9
Swaziland	78.4	73.5	66.9	78.6	62.9	66.3	96.6	91.5	82.2	89.3	81.0	80.7
Syrian Arab Republic	21.7	19.2	16.9	13.1	12.2	10.9	35.3	33.8	32.8	27.2	26.6	24.7
Taiwan	6.6	3.0	2.0	2.0	2.0	2.0	18.3	12.0	4.0	2.0	2.0	2.0
Tajikistan				39.5	44.5	21.5				61.7	78.5	50.8
Tanzania	83.5	82.3	72.6	81.9	88.5	74.4	95.8	95.5	91.3	95.7	96.6	86.8
Thailand	21.9	19.4	11.3	2.0	2.0	2.0	44.0	41.4	33.2	17.4	17.5	11.5
Timor-Leste					52.9	41.9					77.5	67.7
Togo	59.4	58.7	57.6	57.2	53.9	38.7	77.1	78.6	78.2	79.1	76.1	69.3
Trinidad and Tobago	2.0	2.9	3.1	3.9	2.0	2.0	4.2	7.1	11.1	9.1	5.1	2.0
Tunisia	25.2	8.7	5.9	6.5	2.6	7.1	37.5	25.1	19.0	20.4	12.8	16.7
Turkey	16.9	2.0	2.1	2.1	2.0	2.7	25.7	7.7	13.8	9.8	9.6	9.0
Turkmenistan			14.4	63.5	24.8	15.4			50.2	85.7	49.6	26.8
Uganda	64.7	65.9	69.3	64.4	58.9	51.5	87.5	89.9	87.3	85.9	81.2	75.6
Ukraine			2.0	2.0	2.0	2.0			8.4	8.4	8.4	2.0
United Arab Emirates	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Uruguay	9.1	8.7	2.0	2.0	2.0	2.0	16.9	18.8	2.0	3.0	2.3	4.5
Uzbekistan			2.0	28.9	37.2	46.3			2.0	49.9	64.6	76.7
Venezuela, RB	6.2	6.5	2.9	8.7	14.0	10.0	16.4	17.9	9.2	19.5	23.9	19.8
Vietnam	58.1	54.7	53.5	63.7	44.9	22.8	90.9	85.9	83.8	85.7	73.5	50.5
Yemen, Rep.			4.5	15.5	12.9	17.5			15.4	36.7	36.3	46.6
Zambia	52.6	53.3	62.8	63.7	55.4	64.3	68.0	70.0	76.2	80.8	74.8	81.5

References

Chen, Shaohua and Martin Ravallion. 2008. "The Developing World is Poorer Than We Thought, But No Less Successful in the Fight Against Poverty." Policy research working paper no. 4703, World Bank.

World Bank. 2009. *World Development Indicators*. Washington: World Bank.