Changes in Poverty Rates by the Numbers
By Joseph Connors and James D. Gwartney

How is the poverty rate calculated? Poverty could be defined in strictly relative terms: the bottom one-fifth of all income recipients, for example. However, this definition would not be very helpful because it would mean that the poverty rate would never change, as 20 percent of the population would always be classified as poor.

In the United States, the poverty rate is based on the perceived minimum income level required to provide a family with food, clothing, shelter, and other basic necessities. This poverty threshold income level varies with family size and composition, and it is adjusted annually for changes in the general level of prices. The official poverty threshold is based only on monetary income, which

Exhibit 1: Real GDP per capita for the United States, 1960-2012

Changes in Poverty Rates by the Numbers

means that in-kind benefits and other transfers such as food stamps and Medicaid benefits are not counted as income for a family when determining whether they live in poverty. In 2013, the poverty income threshold for a family of four was $24,028. If the income of a family is less than the poverty level threshold, the family is classified as poor. The poverty rate is the percentage of families (or individuals) with incomes below the poverty level threshold. Even though the poverty threshold income level is adjusted for prices, it is a measure of absolute income level. As real incomes increase, the poverty level income threshold will decline relative to the income level of the general populace. Correspondingly, as an economy grows and income per person increases, other things constant, one would expect the poverty rate to decline. Let’s take a look at what has happened to income levels and the poverty rate in the United States.


Source: U.S. Census Bureau
Changes in Poverty Rates by the Numbers

The per capita GDP of the United States has increased substantially since 1960. Real GDP per capita in 2012 was 2.87 times the level of 1960. Given the increase in per capita income during the past half century one would expect the poverty rate to decline. Has this been the case?

Poverty Rate of Two-Parent and Single-Parent Families

Exhibit 2 demonstrates that the poverty rate of single-parent families is generally four to five times higher than the rate for two-parent families. Note how the poverty rate for both family categories was steady during the 1980s, declined during the 1990s, and has increased since 2000.

Exhibit 3: The share of children born to unmarried mothers, 1960-2012

Source: U.S. Census Bureau
Changes in Poverty Rates by the Numbers

More Children are Born to Unmarried Mothers and Raised by Only One Parent

As shown in Exhibit 3, the share of children born to unmarried mothers has substantially increased during each of the last five decades. In 2012, the figure was approximately eight times that of 1960.

Exhibit 4: The share of children (under age 18) residing in single-parent families, 1960-2012

The percentage of children living in single-parent families has persistently increased since 1960. The share in single-parent families in 2012 was more than three times the level of 1960.

Poverty Rate and the War on Poverty

Exhibit 5 illustrates that the poverty rate steadily declined during 1947-1965, prior to the War on Poverty. As the War on Poverty was implemented, the poverty rate continued to decline for
another five years. Since 1970, however, the poverty rate has been relatively steady. By 2012 the poverty rate for both families and individuals was higher than the corresponding figures for 1970. While the growth of income (see Exhibit 1) tends to reduce the poverty rate, the increase in single-parent families (and reduction in two-parent families, see Exhibit 4) pushes the poverty rate upward. In the War on Poverty era, these two factors have approximately offset each other. Unless the decline in two-parent families is reversed, progress against poverty is unlikely.

Poverty is not the only consequence of the expansion in single-parent families. Children raised in single-parent families are more likely to repeat a grade, be suspended from school, engage in violence, and be delinquent. They are also more likely to have lower education levels and other problems. These and many other issues are more likely to occur when children grow up in single-parent families.

Source: U.S. Census Bureau.

Exhibit 5: The poverty rate for individuals and families, 1960-2012
Why Wasn’t the War on Poverty More Effective?

The War on Poverty substantially increased the expenditures on government programs designed to benefit low-income Americans. Measured as a share of national income, the higher expenditure levels continue to the present. Why haven’t these programs been more effective?

The transfers generate two unintended secondary effects that slow progress against poverty. First, the income-linked transfers reduce the incentive of low-income individuals to earn, move up the income ladder, and escape poverty. Eligibility for the transfer programs directed toward the poor is linked to income. As one’s income increases, the benefits derived from various transfer programs declines. As a result, the combination of loss of transfer benefits and additional tax payments means that individuals do not get to keep much of their additional earnings.

Participants in the food supplement program, for example, have their food stamp benefits reduced by $30 for each additional $100 of income they earn. Consequently, every $100 of additional income leads to only a $70 increase in spendable net income after the reduction in food stamp benefits is taken into account. Medicaid, housing subsidies, school lunches, child health care insurance, and several other transfer programs directed toward the poor work the same way. When the combination of these programs is considered, many poor people get to keep only 15 or 20 percent of their additional earnings. In some cases, additional earnings would actually reduce net income. This results in what some refer to as the “poverty wall,” the situation where loss of transfer benefits and additional tax payments virtually eliminate the personal gain derived from additional earnings. If your personal income does not go up much if you earn more, why put forth the effort? Because the transfers reduce the incentive of those with low incomes to work, develop their skills, and earn more, to a large degree, they merely replace income that would have otherwise been
earned and the net gains of these transfer programs for the poor are small—far less than the transfer spending programs suggest.

Second, transfer programs that significantly reduce the hardship of poverty also reduce the opportunity cost of choices that often lead to poverty. This factor is sometimes called the Samaritan’s dilemma. To the extent that antipoverty programs reduce the adverse consequences of, for example, births by unmarried mothers, abandonment of children by fathers, dependence on drugs or alcohol, or dropping out of school, they inadvertently encourage people to make choices that result in these conditions. As Exhibit 2 shows, the poverty rate of single-parent families is four or five times the rate for two-parent families. But the transfers reduce the adverse consequences of single parenting and fathers abandoning their children, and thereby encourage behavior that pushes the poverty rate upward. As Exhibits 3 and 4 illustrate, this is precisely what has happened during the War on Poverty era. Of course, this was not the intent of the transfers, but nonetheless it was one of their side effects. In the short run, these secondary effects may not be very important. Over the longer term, however, their negative consequences can be substantial.

To summarize, transfer benefits linked to income (1) reduce the incentive of recipients to earn and (2) encourage behavior that increases the risk of poverty. As a result of these secondary effects, the ability of transfer programs to reduce the poverty rate is far more limited than what is generally recognized.

Changes in the Poverty Rates of the World, 1980-2005

Poverty in poor countries is very different than poverty in the United States. The World Bank provides the most widely used definition of global poverty. The extreme poverty rate is defined as the percentage of the population in a country with an income level of less than a $1.25 per day (measured in 2005 international dollars). The moderate poverty rate is defined as the percentage of the population in a country with an income level of less than $2 per
Changes in Poverty Rates by the Numbers

day. Income levels in these ranges are generally associated with malnutrition, crowded living conditions, and inadequate access to clean water and healthcare. Reliable estimates of these poverty rates are available for a large set of countries from 1980-2005. We now turn to a consideration of how global poverty rates have changed over time.

Exhibit 6: Extreme ($1.25 per day) and moderate ($2 per day) poverty rates for less developed countries, 1980-2005

Source: Joseph Connors, "Global Poverty: The Role of Economic Freedom, Democracy, and Foreign Aid" (PhD diss., Florida State University, 2011).

The extreme and moderate poverty rates for less developed countries are presented here. The extreme poverty rate declined from 58.4 percent in 1980 to 42 percent in 1990 and to 25.1 percent in 2005. Thus, the extreme poverty rate fell by 57 percent during this quarter-century. The moderate poverty rate declined
from 75.7 percent in 1980 to 62.2 percent in 1990 and to 45.6 percent in 2005, a 40 percent decline during the twenty-five year period. Note that these figures are for less-developed countries only. High-income countries such as Japan, Australia, New Zealand, Canada, and the United States as well as those of Western Europe, are excluded from these figures. Approximately, five billion of the world’s population of six billion lived in less-developed countries in 2005.

What explains this decline in global poverty? For many years having a high population density was commonly considered to be an obstacle for achieving poverty reductions in developing countries. Not surprisingly, this meant that for many, population control was the answer. However, a closer look at the data suggests that this view is incorrect. As Exhibit 8 demonstrates, the largest reductions in poverty took place in Asia in two of the most densely populated countries in the world: India and China. Moreover, one can find the highest concentrations of wealth in densely populated cities such as New York and London, and significant poverty in other densely populated cities such as Bogota, Columbia, and Kinsaha, Congo. This suggests that population is not a statistically significant obstacle in the fight against poverty.

Rather, as Arthur Brooks indicates, the key elements that can explain this reduction in poverty are globalization, free trade, property rights, rule of law, and entrepreneurship. These factors are reflective of economic freedom. Exhibit 7 illustrates the relationship between economic freedom and global poverty.
Changes in Poverty Rates by the Numbers

Exhibit 7: The relationship between economic freedom and extreme poverty—a cross-country analysis

![Bar Chart]


The economic freedom ratings of countries were arrayed from lowest to highest and divided into four groups (quartiles) in Exhibit 7. The average extreme poverty rate of the countries in the four groups is shown here. Countries with more economic freedom have substantially lower extreme poverty rates than those that are less free. The average extreme poverty rate for the countries in the least free group was fifteen times higher than the 2.7 percent rate of the countries in the most free group. The average economic freedom rating of countries increased substantially between 1980 and 2005. This was an important contributor to the decline in the poverty rate during this period.
Changes in Poverty Rates by the Numbers

Exhibit 8: Change in the extreme poverty rate according to region, 1980-2005

(a) Sub-Saharan Africa

(b) Latin America
Exhibit 8: Change in the extreme poverty rate according to region, 1980-2005 continued:

(c) Asia

(d) China

The poverty rate in Latin America is lower than in Africa and Asia. The largest reductions in the extreme poverty rate occurred in Asia where the rate fell from 69.1 percent in 1980 to 26.9 percent in 2005. The progress against poverty in Asia was largely driven by China’s sharp reduction in poverty. See section (d) of Exhibit 8. The extreme poverty rate in China in 2005 was 15.9 percent compared to 84 percent in 1980—an astounding 81 percent reduction during this quarter-century. In contrast, the decline in the extreme poverty rate in Sub-Saharan Africa was small, from 60.8 percent in 1980 to 51.3 percent in 2005.

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