Reconsidering the Federal Poverty Measure

Douglas J. Besharov and Peter Germanis

Project Description
June 14, 2004

Introduction and Summary

The federal poverty measure is the most commonly used indicator of the material well-being of low-income Americans. It compares an individual’s or a family’s income to the amount believed necessary to meet a minimum standard of living. For almost four decades, it has been the primary statistic by which the extent of U.S. poverty is measured and by which federal, state, and local governments allocate means-tested social welfare benefits.

Despite its centrality to many aspects of research, program eligibility, and policy making, the current measure is widely criticized for its many “flaws,” the word used by the report of the National Academy of Sciences Panel on Poverty and Family Assistance: Concepts, Information Needs, and Measurement Methods (hereafter: National Academy of Sciences).1 One example (even though the data have known weaknesses) is the anomaly that many families in poverty seem to spend substantially more on goods and services than would be possible by their reported income. From the left and the right, criticism has been directed at both major elements of the current measure:

- **Income**: The current poverty measure counts some but not all forms of income. It counts welfare payments (about $4,200), because they are in cash. But it does not count noncash benefits such as food stamps (about $2,200), housing assistance (about $5,400), Medicaid (about $6,000 for a family of four), the State Children’s Health Insurance Program (SCHIP) (about $1,000 per child), energy assistance (about $400), the school lunch and breakfast programs (as much as $600 per child), and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) (about $400 per person). It also does not count refundable tax credits such as the Earned Income Tax Credit (EITC) (about $1,700), because they are “post-tax.”2 It also ignores the value of assets (especially home ownership), although it counts any income generated by assets (but not capital gains or losses). And, although it counts the income of family members living in the household, it excludes the income of nonfamily household members such as boyfriends.

---


2 All figures are average benefit amounts in 2002 regardless of family size, unless otherwise noted. Maximum amounts can be much larger: welfare can be as much as $10,000, the Earned Income Tax Credit can be as much as $4,100, food stamps can be as much as $5,500, and housing assistance can be as much as $10,000.
• **Poverty thresholds**: The current poverty thresholds, often called the “poverty line,” are based on the Economy Food Plan, a minimally adequate food budget used in the 1960s when the poverty measure was developed. At the time, food expenditures represented about one-third of after-tax income for the typical family, so the food plan amount was multiplied by three to establish the poverty line. This outdated spending pattern probably does not represent the current cost of meeting basic needs, and ignores some unavoidable expenditures that were not as large forty years ago (such as taxes and child care expenses). In addition, the thresholds do not accurately reflect differences in family size and composition, as well as cost-of-living differences over time and between geographic areas. Conversely, the thresholds have not been corrected for past overadjustments for inflation (especially for overstatements of the cost for home ownership).

Even more fundamental changes have been proposed: Some experts have proposed changing the current “absolute” measure (i.e., one that is pegged to a set level of income or consumption and, hence, only rises with inflation) to a relative one (i.e., one that is pegged to the income or living standards of a selected percentile of society and, hence, rises with the standard of living of the entire society). Other experts have argued for a “consumption” measure, under which spending on (or consumption of) specific goods and services, rather than income, would be compared to a poverty threshold. And still others have argued that both income- and consumption-based measures are only indirect measures of the well-being of low-income Americans and that it would be more accurate to measure their actual physical and emotional condition. Such “well-being” measures (or indices) could track such indicators as health and life expectancy, food insecurity or hunger, living conditions, the absence of other necessities, and even neighborhood conditions.³

Up to now, most proposals to reform the poverty measure have tended to be outcome-oriented, with liberal groups wanting to increase the count of the people in poverty and conservative groups wanting to decrease it. (That the impact of almost every proposal is easily predicted has not encouraged objective discourse.) As a result, proposed reforms rarely gain bipartisan support.

In an attempt to reach across these differences, the University of Maryland, the U.S. Department of Commerce, and the U.S. Department of Health and Human Services (HHS) have established a strongly diverse “research seminar” to explore the limitations of the current federal poverty measure and to identify alternative approaches for gauging the well-being of low-income Americans. The seminar is designed to broaden the policy discourse by providing a neutral ground for discussion, in which many voices can be heard by key government decision makers. In addition to almost all of the senior government officials responsible for the relevant surveys,

---

³For a summary of measures of material hardship and the data sources from which they are available, see Tammy Ouellette, Nancy Burstein, David Long, and Erik Beecroft (prepared for the U.S. Department of Health and Human Services), *Measures of Material Hardship* (Washington, DC: U.S. Department of Health and Human Services, Office of the Secretary, April 2004).
seminar members include researchers and academics broadly representative of different disciplines and political orientations. (The federal government members are listed below.)

We hope that the result of this project will be broad agreement about both the need to change the current poverty measure and the direction of needed change. We plan, for example, to invite observers (and C-SPAN) to the seminar sessions and publish the papers that result (including a cross-cutting summary). We are, however, unlikely to succeed where so many others have failed. Not only do the various reform proposals reflect deep political differences, but major data issues limit the practicality of some proposals. And, if that were not enough, any new poverty measure would almost certainly shift the distribution of poverty among the states—which would probably generate fatal opposition in the Congress because it would shift federal aid from some states to others.

Hence, although we hope that the University of Maryland/Commerce/HHS project can surmount these obstacles, we will use the research and insights gained in the seminar to explore:

1. *How contemporary poverty might be better understood* through a combination of (a) technical improvements to the current poverty measure and (b) greater use of enhanced versions of the Census Bureau’s “alternative” and “experimental” poverty measures; and

2. *How the distribution of social welfare benefits might be improved* by a better understanding of contemporary poverty and a concomitant reexamination of income-eligibility thresholds.

A better poverty measure (or measures) would improve our ability to understand the lives of the poor and gauge how well we, as a nation, are combating poverty, and it also might improve the targeting of social welfare benefits.

**Background**

Over the years, the federal poverty measure has become one of the most commonly used indicators of the material well-being of low-income Americans, and the most commonly used basis of eligibility for means-tested social welfare programs (although often expressed as a multiple of the actual poverty line). Most experts, however, believe that it provides an inaccurate picture of contemporary poverty. But efforts to change the current measure have been mired in controversy because, in the end, they are based on a subjective determination of what it means to be poor in our rich, abundant society.

This project will explore whether the current poverty measure can be improved to reflect more accurately the material well-being of low-income Americans or, if not, whether other measures should be substituted for it. Because neither may be possible, it also explores what other steps would increase our understanding of contemporary poverty. It will also examine the implications of the foregoing on the targeting of social welfare benefits (which tend to be tied to the poverty line or a multiple of it).
The current poverty measure was famously constructed in the early 1960s by the economist Mollie Orshansky at the Social Security Administration. In general, the poverty threshold for a family of a given size and composition was set at three times the cost of the U.S. Department of Agriculture’s “Economy Food Plan” (the predecessor of today’s “Thrifty Food Plan”). Since Orshansky relied on a 1955 survey that showed that American families on average spent about one-third of their after-tax income on food, the idea was that this “poverty threshold” indicated the income level below which any given household might experience nutritional or material hardship.4

In 1969, several modest revisions were made in the Orshansky thresholds involving the inflation adjustment and the level of the farm thresholds. The thresholds with these revisions were then adopted as the federal government’s official statistical definition of poverty. The thresholds have remained unchanged since then except for several minor revisions, such as the elimination of separate thresholds for farm vs. nonfarm families and male-headed vs. female-headed families in 1981. When it was first established in 1963, the poverty threshold for a family of four was about $3,100. In 2002, it was $18,244. (Both amounts are for a family with two adults and two children.)

Each year, the Census Bureau issues its estimates of the “poverty rate,” both nationally and with various demographic and geographic breakdowns. Although this proposal focuses on the current measure’s weaknesses, despite all its problems, it seems to capture the “big picture” and important trends—and has proven to be a useful and informative policy tool. For example, as Figure 1 illustrates, the current measure captures the decades-long decline in poverty among the elderly and the much more mixed picture for children. But, as the figure also demonstrates, it often obscures what is happening. For example, social security payments are countable and therefore reduce the poverty rate among

---

4Orshansky explained that for people below the poverty threshold, “everyday living implied choosing between an adequate diet of the most economical sort and some other necessity because there was not money enough to have both,” and that these people below the poverty threshold “had incomes too low . . . to enable them to eat even the minimal diet that could be expected to provide adequate nutrition and still have enough left over to pay for all other living essentials.” [Mollie Orshansky, “Counting the Poor: Another Look at the Poverty Profile,” Social Security Bulletin 28 (1) (January 1965): 4.]
The “poverty thresholds” are used by the Census Bureau to calculate the number of people in poverty. However, they are not used to determine program eligibility, because the information necessary to calculate them for a particular year is not available until after the year is over. [This includes data from the Consumer Price Index (CPI-U) for the year in question and family composition data from the March Current Population Survey (CPS) of the following year.] As a result, the updated weighted average poverty thresholds are not calculated until September or October of the following year. Thus, the U.S. Department of Health and Human Services also publishes a variant of the thresholds called the “poverty guidelines.” The guidelines are a simplification of the poverty thresholds and are used in determining income eligibility for many federal programs. There are two main differences between the guidelines and the thresholds. First, the guidelines reflect price changes through the preceding year, so, for example, the 2002 guidelines are based on price changes through 2001 (whereas the 2002 thresholds are based on price changes through 2002). Second, the guidelines are calculated for a family of four and then a fixed amount per person is added or subtracted to adjust for family size. In contrast, the poverty thresholds are based on a more complex equivalence formulation, resulting in varying differentials according to family size and even among families of the same size.

The current poverty measure has been

The poverty measure (actually the HHS poverty guidelines), or some multiple of them, are also used to determine eligibility for at least $60 billion in social welfare aid. (This does not include the significant proportion of the $258 billion in Medicaid spending for persons whose eligibility is determined using the poverty guidelines because that amount is not separately identified.) Table 1 lists the thirteen federal means-tested programs with expenditures of at least $1 billion that use these guidelines (or some multiple of them) to establish income eligibility. Many state and local governments also use the guidelines for their own programs, including state health insurance, child care, and child support programs.

Flaws in measuring income.

Table 1

<table>
<thead>
<tr>
<th>Program</th>
<th>Income Eligibility Limit (% of poverty guidelines)</th>
<th>Total Spending (Billions of dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicaid</td>
<td>100% – 250%</td>
<td>$258.216 5</td>
</tr>
<tr>
<td>Food Stamps</td>
<td>100% and 130%</td>
<td>24.054</td>
</tr>
<tr>
<td>SSI</td>
<td>100%</td>
<td>8.172</td>
</tr>
<tr>
<td>National School Lunch Program</td>
<td>130% and 185%</td>
<td>6.064</td>
</tr>
<tr>
<td>Child and Adult Care Food Program</td>
<td>120% and 150%</td>
<td>1.638</td>
</tr>
<tr>
<td>National School Breakfast Program</td>
<td>130% and 150%</td>
<td>1.515</td>
</tr>
<tr>
<td>Consolidated Health Centers</td>
<td>100% – 260%</td>
<td>1.328</td>
</tr>
<tr>
<td>Maternal and Child Health</td>
<td>100%</td>
<td>1.379</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>$320.048</td>
</tr>
</tbody>
</table>


5 Many programs have more than one income eligibility limit, reflecting differences in eligibility across target groups or variations in the level of benefits available.

6 In addition to various income limits related to the poverty guidelines, states may extend categorical eligibility for Medicaid to persons receiving aid through other programs or persons with incomes below state-determined income limits.
attacked from the left for understating poverty,⁷ and from the right for overstating it.⁸ Because each side selects those aspects of the poverty measure that support its case, each side is both correct and incorrect about the impact of the measure’s flaws.

Not all forms of income. The key to understanding the current poverty measure is to know that it does not count major elements of cash and noncash income. (Technically, it is based on total pre-tax cash income, except capital gains.⁹)

The current measure counts cash welfare payments (about $4,200, because they are in cash), but it does not count noncash benefits such as food stamps (about $2,200), housing assistance (about $5,400), Medicaid (about $6,000 for a family of four), the State Children’s Health Insurance Program (SCHIP) (about $1,000 per child), energy assistance (about $400), the school lunch and breakfast programs (as much as $600 per child), and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) (about $400 per person). It also does not count refundable tax credits such as the Earned Income Tax Credit (EITC) (about $1,700), because they are “post-tax.” (All figures are average benefit amounts in 2002 regardless of family size, unless otherwise noted.)¹⁰ The failure to count these means-tested benefits is a major reason why child poverty rates remain high under the current measure. (Another major reason, of course, is that so many children are now being raised by single mothers, who tend to have low incomes.)

The failure to count these other forms of income was not as serious an omission when the official poverty measure was developed in the 1960s. Back then, most means-tested programs provided cash assistance. For example, in 1968, cash aid made up nearly 50 percent of all

---


⁹ The current poverty measure includes only pre-tax, cash income, that is, earnings; unemployment compensation; workers’ compensation; Social Security; Supplemental Security Income; public assistance; veterans’ payments; survivor benefits; disability benefits; pension or retirement income; interest; dividends; rents, royalties, and estates and trusts; educational assistance; alimony; child support; financial assistance from outside of the household; and other income. It excludes refundable tax credits (such as the EITC), capital gains (or losses), goods produced and consumed on a farm, withdrawals from savings, borrowed money, gifts, inheritances or insurance payments, and noncash benefits, such as food stamps, school meals, energy assistance, housing assistance, and government- and employer-paid health insurance.

spending for means-tested programs. But starting with the War on Poverty, an ever-increasing share of spending has gone toward noncash benefits. By 1980, cash aid comprised only about 25 percent of total spending. (Today, it is less than 20 percent; it would have been an even smaller percentage if not for the large expansions in the EITC during the 1990s.) Similarly, the share of employee compensation in the form of nonwage benefits, such as health insurance, has also increased. Between 1966 and 1990, employer costs for nonwage compensation increased 42 percent, from 19.4 percent of total compensation costs to 27.6 percent.

Of course, not all poor families receive benefits from each of these programs. For example, housing assistance is not an entitlement and many low-income families are placed on long waiting lists or do not bother to apply at all. Similarly, many families eligible for Medicaid do not apply for benefits until a medical need arises. Moreover, in regard of Medicaid and Medicare, there is great controversy about how and even whether they should be counted as income. Nevertheless, enough low-income families receive such benefits that counting them would substantially reduce the published poverty rate. (See Table 2, which presents Census Bureau estimates of poverty rates using seventeen different definitions of income.)

Not assets. In addition to income, most families have various assets that could potentially be used to help meet basic living needs or that otherwise help reduce living costs. For example, according to American Housing Survey for 2001, about 46 percent of poor households owned a home, with the median value being about $86,600 (about 70 percent of the median value for all homes), and the equity value being about $52,800. (About 58 percent had paid off their mortgage.)

While few would want to begrudge a low-income family home ownership, the situation is more ambiguous when it comes to the elderly. Many elderly Americans currently counted as “poor” own very valuable homes that, if turned into an income producing annuity, would take them out of poverty. According to Census Bureau calculations, counting the value of home equity would remove about 875,000 elderly persons from the poverty count, or about 25 percent

---

11 Burke, 10.


of all those age sixty-five and older counted as poor under the official measure.\textsuperscript{15}

\textit{Not the income of cohabiters and nonfamily household members.} The family has been the basic unit for official poverty measurement\textsuperscript{16} because family members are presumed to share resources to an extent that other, unrelated household members may not. In the last quarter century, however, the structure of the American family has changed significantly, with a rise in single-parent families, cohabitation, and other forms of nonfamily living arrangements.

The income from these nonfamily members often makes a significant contribution to household income. For example, using data from the 1990 decennial census, Marcia Carlson and Sheldon Danziger, both of the University of Michigan, calculated that counting the income of cohabiters would reduce the poverty rate of children with a cohabiting parent by 39 percent, from 44 percent to 27 percent.\textsuperscript{17} Similarly, using data from the 1992 panel of the Survey of Income and Program Participation (SIPP), the Census Bureau’s Kurt Bauman found that about 55 percent of the 2.95 million people who lived in a cohabiting family (whether or not with children) and were considered poor would not be counted as poor if all their household income were considered.\textsuperscript{18}

Of course, it is not clear how much sharing of finances actually occurs in such households. On average, they probably share less than married couples, but more than the zero amount assumed by the current poverty measure. After considering this issue, the National Academy of Sciences recommended that the cohabiting partner’s income should be counted, because, among other reasons, most partners who live together do so for more than a year and many eventually marry. (This would be consistent with the poverty measure used by Eurostat, the statistical office of the European Union, as well as the practice of most European countries.)

\textsuperscript{15}In counting a home’s equity value, the Census Bureau approach estimates the benefits of converting a home’s equity value into an annuity. Note, also, that the impact of this calculation depends on its placement in the order of other adjustments.

\textsuperscript{16}The current poverty measure is based on the income of all family members related to one another by birth, marriage, or adoption, including spouses, parents, siblings, grandparents, aunts, uncles, cousins, nieces, and nephews.


On the surface, including more forms of income would seem to be an obvious and easy improvement. However, as Table 2 illustrates, adding all reasonably countable forms of income without updating the poverty thresholds would reduce the measured poverty rate to 8.6 percent, a striking result. That is why the reform agenda has also examined the poverty thresholds.

Flaws in the poverty thresholds. As described above, when the poverty measure was developed, food expenditures represented about one-third of after-tax income for the typical family, so the food-plan amount was multiplied by three to establish the poverty line. Since then, food expenditures have fallen to about one-seventh of total expenditures (and are apparently still declining). For example, in 2002, correcting for past overadjustments for inflation would have reduced the poverty rate by about 11 percent, from 12.1 percent to 10.8 percent, resulting in nearly 4 million fewer people in poverty.

---


20. In 1983, the Bureau of Labor Statistics (BLS) adjusted the Consumer Price Index-Urban Consumers (CPI-U), which was used to adjusted the poverty thresholds, to reflect a rental equivalence approach to measure the value of housing. The official CPI-U prior to 1983, however, was not changed to include this correction. The BLS developed an experimental series, the CPI-U-X1, for 1967-1982 based on the rental equivalence approach. Since the CPI-U-X1 shows a lower inflation rate during this time period, it has the effect of lowering poverty thresholds for those and subsequent years. As a result, fewer people would be counted as living in poverty.

Support for raising the thresholds (assuming that more forms of income were also counted) also comes from public opinion polls. In 1986, a Gallup poll asked 2,200 people what would be the smallest amount of money that a family of four needs to “get along in [their] community.” The median answer was $18,148 a year, about 63 percent higher than the official poverty line.22 In 1987 and 1995, a RoperASW survey asked respondents how much their families needed “just to get by.” The median answers were $20,000 and $25,500, respectively, about 70 percent higher than the official poverty line.23

Of course, so much depends on the question that is asked. Another poll, conducted in April 2000 by Lake, Snell, Perry, & Associates, found that 69 percent of Americans believe that a family of four needs at least $35,000 a year “to make ends meet.”24 This is about double the poverty level. But when the Gallup Organization asked, in 1989, a nationally representative sample the dollar amount they would use to define the poverty line for a family of four, although the responses varied widely, the average figure was 24 percent higher than the official poverty threshold for such a family.25

Understating the cost of meeting basic needs. Thus, many argue that the current poverty thresholds do not represent the current cost of meeting basic needs. For example, the National Academy of Sciences recommended: “The poverty thresholds should represent a budget for food, clothing, shelter (including utilities), and a small additional amount to allow for other needs (e.g., household supplies, personal care, non-work-related transportation).”26

No adjustment for work-related expenses. The thresholds also ignore some unavoidable expenditures that were not as large forty years ago. Taxes are a good example. In 1966, the poorest tenth of the population paid only about 1 percent of its income in federal income taxes and about 3 to 5 percent in Social Security payroll taxes.27 By 1985, these percentages had increased to about 4 percent and 9 to 11 percent, respectively. Of course, the EITC now offsets a
substantial portion of this the tax burden for families with children, but if the EITC is counted as income, then taxes paid would also have to be considered.

Some have argued that the poverty thresholds should be based on disposable income, rather than gross money income. For example, the National Academy of Sciences recommended that “nondiscretionary expenses,” such as “taxes, child care and other work-related expenses, child support payments to another household, and out-of-pocket medical care expenditures (including health insurance premiums)” should be deducted from income for families with such expenses.\(^\text{28}\) Some of these “expenses” can represent a significant percentage of family income. For example, in 1997, about 30 percent of poor, employed mothers paid for child care and, for those who did, the payments represented about 20 percent of their income.\(^\text{29}\) Despite the fact that the families with out-of-pocket child care expenses have less income to meet other needs, the current approach treats them the same as families that do not pay for child care. There is little discussion, however, of the fact that families with working mothers have higher total incomes than those without a working mother, and that many single working mothers living in poverty do not have child care expenses because a parent or other relative cares for their children.

Others would go much further in raising thresholds. Heather Boushey and her colleagues at the Economic Policy Institute argue that the federal poverty line is “obsolete” and have developed their own “basic family budgets” that identify the annual cost of purchasing the goods and services necessary for a “working family to maintain a safe and decent standard of living.”\(^\text{30}\) They applied separate estimates for the cost of housing, food, child care, transportation, health care, other necessities, and taxes to six family types and 400 communities. According to their calculations, the national median basic family budget for a two-parent, two-child family in 1999 would have been $33,511 (nearly twice the poverty level of $16,895 for a similar family in 1999). There was, however, significant geographic variation, with basic budgets ranging from

\(^{28}\)Citro and Michael, 45.


$27,005 to $52,114, depending on the community. Using this measure would raise the official poverty rate for families with one to three children from 9.6 percent to 27.6 percent.\(^{31}\)

**No adjustment for geographic differences.** Also not reflected in the thresholds are geographic differences in the cost of living (especially between urban and rural areas). The original measure made a distinction between farm and nonfarm families,\(^{32}\) but the Census Bureau has never attempted to reflect what are often major cost differences across the nation. The conceptual and data problems of doing so, however, are substantial. The National Academy of Sciences recommended adding an adjustment for differences in shelter costs for “relatively large geographic areas,” defined as nine regions of the country, but recommended further research before doing so for “other components of the poverty budget.”\(^{33}\) Even this modest suggestion, however, would result in within-region differences as great as differences between regions.\(^{34}\) (The Academy also recommended developing a cost-of-housing index within each region by population size class of metropolitan area.)

**Anomalous equivalence scales.** Actually, Orshansky established 124 separate poverty thresholds. She adjusted her initial thresholds to reflect differences in the number of family members who were children, the sex of the family head, the farm/nonfarm status of the family, and (for one- and two-person units only) whether the individual or family head was age sixty-five or over.

---

\(^{31}\) The poverty rate calculation was limited to families with positive earnings and was based on data from the CPS for 1997–1999.

\(^{32}\) The original measure included separate thresholds for farm and nonfarm households, because farm families purchased only about “60 percent of the food they consumed” and because they could include their housing expenses “as part of the farm operation.” [Gordon M. Fisher, “The Development and History of Poverty Thresholds,” *Social Security Bulletin* 55 (4) (Spring 1992), available from: http://www.ssa.gov/history/fisheronpoverty.html, accessed March 30, 2004.] Thus, the farm poverty thresholds were initially set at 60 percent of the nonfarm poverty thresholds. The percentage was subsequently increased to 70 percent in 1965, to 85 percent in 1969, and the differential between the two was eliminated altogether in 1981. Gordon Fisher, a poverty expert at the U.S. Department of Health and Human Services, observes that “Orshansky’s farm/nonfarm distinction was not the same as a rural/urban (or nonmetropolitan/metropolitan) distinction.” [Fisher 1992.]


\(^{34}\) Kathleen Short and her colleagues explain, “Determining how one adjusts poverty thresholds for geographic differences in the cost of housing and in the overall cost of living is a critical area for further research. The procedure proposed by the Academy and used . . . in this [report] is a ‘modest step in the right direction,’ in that it is understandable, operationally feasible, and produces results that conform to other research. However, the procedure does not account for differences within areas, such as differences in costs between central cities or suburbs of large metropolitan areas, or for differences in areas like Alaska and Hawaii versus other areas in the Pacific division. The method also does not account for housing quality differences. This topic requires further research and development.” [Kathleen Short, Thesia Garner, David Johnson, and Patricia Doyle, *Experimental Poverty Measures: 1990 to 1997*, Current Population Reports (Washington, DC: Government Printing Office, 1999), 27, available from: http://www.census.gov/prod/99pubs/p60-205.pdf, accessed March 30, 2004.]
Many analysts believe, in the words of the National Academy of Sciences, that these adjustments have “irregularities and anomalies.”35 “For example, under the current scale, a spouse adds only 29 percent to family costs; the first child adds almost as much (26%), and the second child adds a yet greater amount (40%). These patterns are not consistent with the view that adults need more than children nor with economies of scale for larger families.”36

In the abstract, correcting equivalence scales is probably the least controversial aspect of reform. Broad technical agreement ought to be reachable about such things as the relative consumption needs of children compared to adults and the economies of scale associated with larger families. And, the process is unlikely to implicate ideological differences. But the distributional changes could be large, so even here the political process could stymie change.

**More fundamental changes.** As a society, we are now much wealthier than in the 1960s. Between 1963 and 2002, per capita personal disposable income more than doubled (up 106 percent), from $13,204 to $27,223, and per capita personal consumption expenditures rose slightly more (115 percent), from $11,888 to $25,588 (all in 2002 dollars).37

![Table 3: Material Well-Being: Poor Households in 1984 and 1994 vs. All Households in 1971](http://www.dallasfed.org/fed/annual/1999p/ar95.pdf)

<table>
<thead>
<tr>
<th></th>
<th>Poor households</th>
<th>All households</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of households with</td>
<td>1984</td>
<td>1994</td>
</tr>
<tr>
<td>Washing machine</td>
<td>58.2</td>
<td>71.7</td>
</tr>
<tr>
<td>Clothes dryer</td>
<td>35.6</td>
<td>50.2</td>
</tr>
<tr>
<td>Dishwasher</td>
<td>13.6</td>
<td>19.6</td>
</tr>
<tr>
<td>Refrigerator</td>
<td>95.8</td>
<td>97.9</td>
</tr>
<tr>
<td>Freezer</td>
<td>28.2</td>
<td>28.6</td>
</tr>
<tr>
<td>Stove</td>
<td>95.2</td>
<td>97.7</td>
</tr>
<tr>
<td>Microwave</td>
<td>12.5</td>
<td>60.0</td>
</tr>
<tr>
<td>Color television</td>
<td>70.3</td>
<td>92.5</td>
</tr>
<tr>
<td>VCR</td>
<td>3.4</td>
<td>59.7</td>
</tr>
<tr>
<td>Personal computer</td>
<td>2.9</td>
<td>7.4</td>
</tr>
<tr>
<td>Telephone</td>
<td>71.0</td>
<td>76.7</td>
</tr>
<tr>
<td>Air conditioner</td>
<td>42.5</td>
<td>48.6</td>
</tr>
<tr>
<td>One or more cars</td>
<td>64.5</td>
<td>71.8</td>
</tr>
</tbody>
</table>

* At or below the poverty line, as defined by the Census Bureau.


The American middle class lives a life of affluence almost unimaginable to past generations. Even people in poverty live much more comfortable lives. As Table 3 shows, today’s poor have, on average, greater access to various modern-day conveniences than the general population in 1971. This includes washing machines, clothes dryers, dishwashers, refrigerators, stoves, color televisions, and air conditioners. In 1994, most poor households had a microwave and a VCR, appliances virtually unknown in 1971.38

This increase in societal wealth has led to proposals (largely from the left) to make the poverty measure “relative” to the

35 Citro and Michael, 60.

36 Citro and Michael, 60.


broader society’s wealth and to proposals (largely from the right) for adopting a poverty measure based on consumption or even well-being.39

Relative measures. The current measure is essentially “absolute” in that it is pegged to a set level of income and rises only with inflation.40 A “relative” measure is pegged to the income or living standards of a selected percentile of society and, hence, rises with the society’s general standard of living.

Liberals tend to like relative poverty measures because, over the years, they tend to result in a higher poverty line and, hence, a higher poverty rate, than measures adjusted only for inflation.41 As far as we can tell, no major group in this country has called for a completely relative measure, like the ones used in Europe.42

The National Academy of Sciences recommended what has been referred to as a “quasi-relative”43 or “hybrid”44 poverty measure because it has both absolute and relative features. Absolute because its thresholds would comprise a dollar amount for food, shelter (including utilities), plus a small additional amount for other needs. Relative because the thresholds would not be updated for inflation but, rather, for changes in median expenditures for the basic goods

---


40Gordon Fisher explains that Orshansky described her poverty thresholds “as a ‘relatively absolute’ measure of poverty, inasmuch as they were developed from calculations that made use of the consumption patterns (at a particular point in time) of the U.S. population as a whole. In the dichotomy between relative and absolute definitions of poverty, one of the essential characteristics of a purely ‘absolute’ definition is that it is derived without any reference to the consumption patterns or income levels of the population as a whole.” [Fisher 1992, 6.]

41John Cogan, “Dissent,” in Citro and Michael, Measuring Poverty: A New Approach, 387, stating: “The panel report recommends updating the poverty line annually by the growth rate in the median level of expenditures on food, clothing, and shelter, rather than by the Consumer Price Index as is the current practice. If adopted, the recommendation would fundamentally change the concept of poverty from an absolute standard to a relative standard. Under the recommended method, the poverty line would rise about 8 percent faster per year than under the current method.”


and services upon which the thresholds are based. In other words, it would rise as society generally consumes more. As the Academy’s report explains:

The procedure we propose for updating the poverty thresholds should link them closely to societal norms about the appropriate level for a poverty line. Our proposal is to update the thresholds for real changes in the consumption of food, clothing, and shelter. In contrast, the current measure simply updates the thresholds for price changes. The proposed measure, thus, is a type of relative measure, but it is not the same as a fully relative measure, such as one-half median income or expenditures, that would update the thresholds for changes in total consumption, including luxuries as well as basic goods and services.45

Relative measures also have to be constructed with great care and interpreted in perspective to avoid anomalous results. A measure based on a percentage of median income, for example, is hostage to the lower tail of the dispersion of income and to the reference group. Nations with smaller differences in income, even if they are relatively poor, tend to show lower levels of poverty. For example, the widely respected Luxembourg Income Study estimated poverty rates for twenty-nine nations (across four continents) using various percentages of median income.46 Defining the poverty line at 50 percent of median income in 2000 (or, in some countries, the late 1990s) resulted in the United States having a poverty rate (17 percent) close to that of Russia (19 percent) and Mexico (22 percent). For the elderly, the U.S. poverty rate according to this measure is nearly twice Russia’s (25 percent compared to 14 percent). Clearly, low-income elders in the United States are far better off than are elders in Russia. On the other hand, the elderly in twenty-five other rich countries have lower poverty rates than do the elderly in the U.S., and they need not worry about being able to afford whatever drugs or physician care they need—although the quality of their health care may be lower than that in the U.S.

Consumption measures. Material want implies inadequate consumption, and, ultimately, consumption patterns define living standards.47 As the National Academy of Sciences report comments, “families and individuals derive material well-being from actual consumption of goods and services rather than from receipt of income per se; hence, it is appropriate to estimate their consumption directly.”48 (A consumption-based measure is not as sensitive to temporary income changes as the current measure and it includes items purchased with noncash benefits.)

45 Citro and Michael, 42–43.


47 See, for example, Robert K. Triest, “Has Poverty Gotten Worse?,” Journal of Economic Perspectives 12 (1) (Winter 1998): 109, stating: “Economists generally view a family’s level of consumption as a better measure of its economic well-being than current money income.”

Moreover, for lower-income people especially, income tends to be an poor indicator of true living standards. Using the Consumer Expenditure Survey (CEX), Nicholas Eberstadt of the American Enterprise Institute found that, in 2000, consumer units in the bottom quintile of income spent about more than twice their income on various goods and services.\textsuperscript{49} Although the actual difference may be exaggerated because of data problems,\textsuperscript{50} most analysts believe that consumption is higher than reported income. Besides income derived from the underground economy, explanations include that families with temporarily low incomes (such as newly separated couples) may be able to maintain consumption levels by relying on accumulated assets, borrowing from friends, or using credit cards. Similarly, retirees may draw down their savings and investments.

Researchers have explored the impact of a “consumption” measure, under which spending (or consumption) of specific goods and services, rather than income, is compared to a poverty threshold. Some have found that poverty rates are lower under a consumption-based measure.\textsuperscript{51} For example, Dale Jorgenson, professor of economics at Harvard University, and Daniel Slesnick, professor of economics at the University of Texas-Austin, report that between 1973 and 1983, the poverty rate based on a consumption measure fell from 10.9 percent to 6.8 percent, even as the official measure showed an increase, from 11.1 percent to 15.2 percent.\textsuperscript{52} Other researchers, however, have found that such findings are sensitive to the data and methodological approach used to measure consumption-based poverty.\textsuperscript{53}


\textsuperscript{50}There are several possible explanations for the mismatch. According to officials from the Bureau of Labor Statistics, the main reason for the discrepancy is “under-reporting or non-reporting of income by respondents.” See, for example, “Communications,” \textit{Monthly Labor Review} 123 (12) (December 2000), available from: \url{http://www.bls.gov/opub/mlr/2000/12/comm.htm}, accessed March 28, 2004. This problem is exacerbated in the CEX because the BLS imputes its expenditure data for missing data, but not its income data. In addition, sample loss appears relatively high, which could bias the sample if those who leave are systematically different from those who do not. But data anomalies explain only part of the discrepancy.


As the National Academy of Sciences concluded, as of now, it appears that “adequate data with which to implement a consumption-based resource definition for use in the official poverty measure are not available.”\textsuperscript{54} Given existing data limitations, some advocates of this approach would define consumption in terms of total expenditures on a specified bundle of goods and services.

\textit{Well-being measures}. Others have argued that both income- and consumption-based measures are only indirect measures of the well-being of low-income Americans and that it would be more accurate to measure their actual physical and emotional condition. Susan Mayer and Christopher Jencks examined the link between income and material hardship in Chicago during the early 1980s.\textsuperscript{55} Their research suggested that income-based poverty measures are only loosely correlated with many direct measures of material hardship.

Others have gone further, looking at a host of other measures of well-being.\textsuperscript{56} Recently, an attempt was made to gauge the well-being of children over time. Kenneth Land, a professor of sociology at Duke University, and his colleagues examined twenty-eight indicators of the children’s well-being from 1975 through 2003.\textsuperscript{57} He combined these indicators into seven categories (material well-being, health, safety/behavioral concerns, educational attainment, community participation, social relationships, and emotional/spiritual well-being). He then created a composite score by assigning equal weights to each indicator within each category and then equal weights to each of the categories. The index indicated that children’s overall well-being increased substantially between 1994 and 2000, although it showed only a 5 percent increase since 1975. According to Land, six indicators had an important impact on the index: obesity, single parent families, poverty, criminal offending and victimization, teenage birth rates, and suicide.\textsuperscript{58} Many of these indicators would not appear in traditional estimates of material well-being.

It seems clear that being systematic in this area will require creating measures (or indices) that track such indicators as health (including infant mortality, life expectancy, potential years of life lost, general or chronic health conditions, dental caries/tooth decay, activity limitations, obesity, and perhaps access to basic health care or health insurance), lack of access

\textsuperscript{54} Citro and Michael, 213 (emphasis added).


\textsuperscript{56} See, for example, Nicholas Eberstadt, “A Poor Measurement,” \textit{Wall Street Journal}, April 22, 1996.


to basic health care or health insurance, food insecurity or hunger, living conditions (including homelessness, housing conditions, and household appliances), neighborhood conditions (such as crime rates and access to public services, such as transportation, police and fire protection, and good schools), and the absence of other necessities.

This would be a massive and, again, subjective process, fraught with data, weighting, and interpretation difficulties.

The Census Bureau’s “alternative” and “experimental” measures. The developments traced in this paper have not been ignored by the Census Bureau. In 1982, its first report of “alternative methods” for measuring poverty was published.59 The report sought “to explore the issues, data requirements, and technical feasibility of measuring and valuing in-kind income” for the purpose of assessing the “effect on the size and composition of the official poverty population.”60 Using data for 1979 and the broadest definition of income, the so-called “market value approach,” the official poverty rate was reduced from 11.1 percent to 6.4 percent after counting the value of various noncash food, housing, and medical benefits. (The market value was equal to “the purchase price in the private market of the goods received by the recipient.”61 For a program like food stamps, this was the face value of the food stamp coupons, but for Medicaid and Medicare, an insurance value was computed.) Other definitions produced somewhat smaller effects.

Since 1982, the Census Bureau has published annual estimates of “experimental poverty rates” that include the value of noncash benefits. It has, however, periodically revised its approach to valuation of these benefits. In addition, in 1988, it included an estimate of the impact of taxes and the imputed return on home equity (for the poverty rate in 1986).62

These initial efforts focused on different approaches to valuing various forms of noncash income; they did not explore issues related to the poverty thresholds themselves. But after the National Academy of Sciences issued its 1995 report about changing the poverty measure, the Census Bureau expanded its “experimental poverty measures” to include poverty estimates reflecting various combinations of the Academy’s recommendations and refinements to them.63


60 Smeeding, v.

61 Smeeding, vi.


63 See, for example, Short, Garner, Johnson, and Doyle.
Primary among these have been adjustments for work-related expenses, noncash benefits in measuring income, family size, the treatment of health care costs, and cost-of-living differences across geographic areas.64

In its 2002 report on poverty, the Census Bureau published two sets of “alternative estimates of poverty.” One set focused on the Academy’s recommendations “on how to measure resources (income) and how to change the poverty thresholds (the measure of need).”65 The second set of “alternative” estimates continued to build on past estimates that accounted for the value of noncash benefits, taxes, and imputed return to home equity. In addition, it estimated poverty rates using both the official CPI-U as well as the experimental CPI-U-X1, which corrected for the overstatement of the thresholds between 1967 and 1982.

In September 2003, the Census Bureau released a report describing a third approach, using “consumption-based measures using expenditures and other indicators of material well-being.”66 This report was “intended to complement the official income-based measures and the two existing series of alternative poverty estimates to expand our understanding of the nature of poverty in the United States.”67

We think that these and related efforts provide a rich base for further analysis, and—taken together—provide an alternative approach to “measuring” poverty. In fact, they probably provide a more promising approach than seeking the chimera of one, perfect poverty measure. As Robert Haveman, professor of economics at the University of Wisconsin-Madison, and Melissa Mullikin explain:

Substantial differences in both the level and trend of poverty exist among the several measures. The composition of the poor population also varies according to the concept and measure of poverty that is adopted. These differences suggest no single poverty measure has a monopoly in identifying the number of people in a nation who are destitute, and the growth and composition of the poor. Each measure contributes to our understanding of the nature of poverty, and hence of the consequences and costs of poverty; they are complements, not substitutes.68

---

64 Proctor and Dalaker, 15.
65 Proctor and Dalaker, 14.
66 U.S. Census Bureau 2003, 1.
67 U.S. Census Bureau 2003, 1.
These various reports and the technical work and papers that underlie them provide a broader and more nuanced view of contemporary poverty. For example: Measuring the impact of noncash assistance helps explain why child poverty rates have not declined as much as might be expected despite the sharp increase in spending on an array of means-tested programs; measuring the impact of home ownership on the economic condition of the elderly helps to explain why so many do not seem to be in financial extremis notwithstanding low cash incomes; measuring the economic impact of shared living arrangements among many single-mother families helps explain how they cope on what otherwise would seem to be very low incomes; and measuring the dramatic improvements in the living conditions and well-being of people in poverty helps to show the positive impact of various noncash anti-poverty programs.

**Seminar Series**

A central activity of this project is a series of research seminars being jointly sponsored by the University of Maryland, the U.S. Department of Commerce, and the U.S. Department of Health and Human Services. The seminars are chaired by Douglas J. Besharov, professor, School of Public Affairs, University of Maryland, and co-chaired by Kathleen Cooper, Under Secretary for Economic Affairs, U.S. Department of Commerce, and Michael O’Grady, Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services.

In an attempt to reach across partisan and ideological differences, we have established a strongly diverse “research seminar” to explore the limitations of the current federal poverty measure and to identify alternative approaches for gauging the well-being of low-income Americans. In the words of the summary developed for the project, the seminar will “examine issues related to measuring the material well-being of the officially defined poor (as well as the very poor and near poor) and the alternative definitions of income measures.” The summary continues:

This project will examine a range of well-being/hardship measures, as well as the data and analytical issues that surround them, including: the quality of income data, the role of wealth and assets, the impact of changed living arrangements, and potential adjustments to the equivalence scales used in setting poverty thresholds, as well as issues related to alternative measures such as the use of consumption measures and measures that capture other aspects of family well-being. This project is intended to stimulate new ways of thinking about poverty and to lead to a broader understanding of the progress that has been made in alleviating poverty.

**Members.** The seminar is designed to broaden the policy discourse by providing a neutral ground for discussion—in which all voices can be heard by key government decision makers. The seminar series will have “a core group of attendees comprised of senior officials in and out of the government.” The senior level of government participation should be emphasized.

*Confirmed* government attendees include almost all of the senior government officials responsible for the relevant surveys:
The presence of these senior officials, and the fact that the federal government is providing the funding for the seminar series, assures that key executive branch decision makers will be exposed to the project’s findings and conclusions. (The seminar’s nongovernmental participants will include researchers and academics broadly representative of different disciplines and political orientations.)

**Topics.** The seminars will meet between eight and ten times over the course of one year on the data and analytical issues related to the measurement of poverty. At each seminar session, two papers will be presented on the topics listed below. One paper will be on “data issues,” that is, it will discuss the quality of the data underlying the measure and the implications for the
Any assessment of poverty measures must also address the accuracy and reliability of the data that will be used for such measurements. All data sources are subject to such problems as nonresponse, attrition, and misreporting of income, consumption, or various elements of material well-being. For example, the Census Bureau’s March CPS, the data source for family income used to calculate the official poverty rate, appears to underreport the amount of income available to families. (This problem affects other data sources as well.) Income from various welfare programs, in particular, is more likely to be underreported than most other income sources and may therefore lead to an overstatement of the poverty rate.

The other paper will discuss “analytic issues,” that is, how the data should be interpreted, and the strengths and weaknesses of using it to measure poverty. The specific topics to be examined include:

- **Introductory session: A mismatch between the official poverty count and other social welfare indicators?** This opening session will explore the material well-being of the people in poverty under the official measure to see what that suggests about the need to modify the poverty measure.

- **Alternative and experimental definitions of income.** This session will explore the feasibility and implications of counting other forms of income in measuring poverty.

- **Material well-being and consumption expenditures.** This session will explore the feasibility and implications of basing poverty measures on the consumption of goods and services, rather than income.

- **Wealth and assets.** This session will explore the feasibility and implications of including the value of assets in measuring poverty.

- **Poverty thresholds and equivalence scales.** This session will explore the feasibility and implications of modifying the adjustments made to poverty thresholds to account for different family characteristics.

- **Income from nonfamily members of the household.** This session will explore the feasibility and implications of counting nonfamilial contributions toward household income.

- **Physical and emotional well-being.** This session will explore the feasibility and implications of using more direct measures of well-being to measure poverty.

- **The intersection of poverty and the social welfare benefit structure.** The closing session will focus on how the poverty measure is used to establish eligibility for many social welfare programs and, in turn, how those programs affect the level and trend in poverty and material well-being in the United States.
Products and Dissemination

We hope that the result of this project will be broad agreement about both the need to change the current poverty measure and the direction that the change should take. Only its stylized consistency over many decades has prevented it from generating ridiculous results.

It seems unlikely, however, that this project will succeed where so many others have failed. Not only do the various reform proposals reflect deep political differences, but major data issues limit the practicality of many proposals. If that were not enough, any new poverty measure would almost certainly shift the distribution of poverty among the states—which would probably generate fatal opposition in the Congress because it would shift federal aid from some states to others. Recently, for example, changes in the distribution of poverty among states would have resulted in a change in the distribution of funds for the Legal Services Corporation. Rather than have some states lose funding because of the change (even though others would have gained), Congress adjusted the formula to hold states harmless against their declines in poverty (even though this meant less money for states that had an increase in poverty).  

Hence, we take public and professional education to be one of the project’s most important objectives. We plan, for example, to invite observers (and C-SPAN) to the seminar sessions. We also plan to publish the seminar papers, together with a summary of the related discussion.

Ultimately, however, we expect the project to prove the correctness of observations like those of Haveman and Mullikin that no single measure will successfully capture all the dimensions of poverty. Instead, as Rebecca Blank, dean of the University of Michigan’s School of Public Policy, has concluded: “Rather than a single poverty measure, what you really want is to develop multiple measures of deprivation and look at them on a regular basis.” Thus, the project will also explore:

• How contemporary poverty might be better understood. In the end, it may be that the only feasible changes will be technical (especially in regard to equivalence scales and perhaps in what income is counted). Hence, we expect to emphasize how the Census Bureau’s “alternative” and “experimental” poverty measures could be used to provide a fuller and more accurate picture of contemporary poverty. We would describe how these measures and the data underlying them could be enhanced to make them more useful, and more accessible to outside researchers. (This probably means having fewer of them and allocating more resources to those remaining.)

---


• *How the distribution of social welfare benefits might be improved* by a better understanding of contemporary poverty and a concomitant reexamination of income-eligibility thresholds. Multiple poverty measures might be especially helpful for identifying those who are most in need of particular government social welfare programs. Blank suggests that “you might have a level of neighborhood crime that is some threshold level of acceptability, and then you determine how many people live in neighborhoods where the crime rate is above the acceptable level.”72 More immediately would be a reconsideration of eligibility that takes into account other forms of income and the particular needs of clients. For example, if both have equal total incomes, why should someone who has cash earnings be treated as less needy than someone who receives food stamps and other benefits that are not counted against income-eligibility? Why should an elderly person with a large house but little income be treated as being as needy as someone without one? We would not ask such questions in order to reduce spending on particular programs, but to increase the likelihood that limited benefits go to those most in need.

Most analysts, wherever they are on the political spectrum, think that the current poverty measure is flawed. Because of political and ideological differences, they just can’t agree on how to fix it. This stalemate, now at least three decades long, has handicapped continuing efforts to reduce poverty. It may be that, for ideological and political reasons, the current poverty measure cannot be readily reconceptualized or reformed in any major way. But that does not mean that the situation cannot be improved.

We believe that this project will help rekindle interest in reexamining the federal government’s poverty measure, illuminate the debate about the best way to define poverty, provide alternative ways to assess the hardships facing low-income Americans, and provide a richer approach to targeting social welfare benefits.

---

72 Uchitelle.