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POVERTY MEASUREMENT

Issues in Revising and Updating the Official Definition





United States
General Accounting Office
Washington, D.C. 20548

**Health, Education, and
Human Services Division**

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The Honorable Daniel Patrick Moynihan
Ranking Minority Member
Committee on Finance
United States Senate

Dear Senator Moynihan:

The official U.S. poverty measure, as devised 3 decades ago, compares a family's income with a level believed necessary to purchase a minimum standard of living. This measure is widely used as an indicator of the economic well-being of the population, for analysis of government policies, and in allocating benefits in social welfare programs, but it has not changed significantly since 1965. Over the past 2 decades, researchers have questioned the accuracy of its measurement of family resources for this purpose, as well as the appropriateness of the level of income used to define poverty. Two years ago, the National Academy of Science's National Research Council (NRC) Panel on Poverty and Family Assistance issued a report, Measuring Poverty: A New Approach (1995), recommending a thorough review and updating of the definition of family income and its standard for comparison.

This letter responds to a request from your office that we describe various issues involved in updating the federal government's measure of poverty. As agreed with your office, in this report we identify (1) the issues associated with measuring a family's economic well-being and setting a standard below which families are considered poor, (2) the suggestions experts have for addressing these issues, and (3) recent developments on these issues since the NRC panel issued its report in 1995. To do this work, we reviewed the panel's report and recommendations and literature published since 1995, and we interviewed selected experts in the areas of poverty measurement and government statistics. These experts included 4 academic researchers, 3 of whom were members of the panel; the panel's study director; and 10 federal government officials who were either involved in the production of poverty statistics or were consumers of those statistics. As agreed with your office, we did not independently analyze the various technical approaches discussed, but, instead, are summarizing expert opinion on these issues. Previously, you asked for information about an experimental measure suggested as a replacement for the current measure, which uses the amount a family spends on goods and services, rather than its income, as the measure of a family's

well-being. In separate correspondence we provided a description of this methodology.¹ We conducted our work between June 1996 and February 1997 in accordance with generally accepted government auditing standards.

Results in Brief

Defining a measure of the extent of poverty consists of two fundamental decisions: first, how to define a family's resources and, second, how to select a threshold, or standard, to represent a "minimally adequate standard of living." While the two decisions are distinct, the two definitions must be consonant with each other so that the eventual comparison of a family's resources with a standard is considered fair. Developing a useful and practical measure involves making a number of choices that require balancing conceptual and practical considerations as one addresses these two fundamental decisions.

The choices or issues to address in developing a routinely available, reliable measure of a family's economic resources include (1) whether to directly measure a family's spending on basic necessities or use income and other economic resources as a proxy for their ability to buy these necessities, (2) which economic resources should be considered available for meeting a family's basic needs, and (3) whether existing data sources are adequate (for whichever resource definition is selected) or should be modified to improve the reliability of poverty estimates.

Some issues in updating the family resource measure seem to be fairly well resolved in the scientific community, while additional discussion and research may be needed to reach consensus on some of the practical details. Although assessing a family's expenditures might provide a more direct picture of its economic well-being than income, measuring income is considered to be more feasible for obtaining routinely available poverty statistics. The panel recommended that the official poverty measure should define a family's economic resources to include disposable money income and near-money government benefits, although experts differ on how to make some of the adjustments to cash income. Finally, an existing survey of income is believed capable, with some modification, of providing more accurate and comprehensive data on family economic resources than the source currently used for poverty statistics.

Issues to address in developing a contemporary set of poverty thresholds to represent a "minimally adequate standard of living" for families in

¹Alternative Poverty Measures (GAO/GGD-96-183R, Sept. 10, 1996).

different circumstances include (1) what basis should be used to set the level of the thresholds, (2) whether to accommodate changes over time in standards of living as well as in prices, (3) how to quantify the differences in needs between families of different size and composition, and (4) whether and how to accommodate geographical differences in the cost of living.

In contrast to defining family resources, additional research may lead to consensus on some issues in selecting a set of poverty thresholds, but other issues will require policy judgment. It is generally recognized that determining a minimum standard of living unavoidably requires judgment, although research can provide guidance to bracket a set of alternatives. We found mixed views on whether the thresholds should be automatically updated for change in family spending patterns as well as for change in prices. The panel proposed a statistical formula derived from the literature to develop thresholds for different family sizes, but lacking an objective way to measure the difference in needs between families, left setting the formula's exact terms to policy judgment. Finally, the experts we interviewed agreed with the panel that geographic price differences were appropriate to incorporate in the thresholds, but they were uncertain about whether existing methods were technically adequate to do so.

The Office of Management and Budget (OMB) has not yet begun a formal review of the poverty measure as the NRC panel recommended, but it plans to create a working group soon with the Bureau of Labor Statistics (BLS), the Bureau of the Census, and other interested agencies to explore general issues in measuring income and poverty and consider alternative measures to be developed and tested. BLS and Census staff have initiated exploratory work examining the current feasibility of implementing some of the panel's recommendations and modifying existing surveys. However, since these agencies may have several data collection projects under way to address issues other than poverty measurement, it is important that proposed changes to ongoing surveys are carefully coordinated.

Background

The Official Poverty Measure

Researchers have defined poverty in a variety of ways. It can be defined as deprivation experienced in material terms, such as hunger or poor housing quality; in economic terms, such as inadequate income; or in social terms,

such as isolation from the community or feelings of low self-esteem. In U.S. government statistics, poverty is defined as economic deprivation—that is, lacking the economic resources to meet basic needs—which can put families at high risk of material deprivation. Although some might prefer to directly measure a family’s level of material deprivation, this is impractical for an annual statistic because it is difficult to objectively assess the quality of a family’s standard of living and then to combine measures for various basic needs (such as food, shelter, and clothing) into a single indicator that can be readily analyzed.

In 1969, the federal government officially adopted a poverty measure to determine how many people across the country had incomes that were inadequate to meet expenses for basic needs. The official measure determines a family’s poverty status by comparing its resources, defined as before-tax money income, with a standard income level, or “threshold,” designated for that family’s size and composition. Information on income received in the previous calendar year is collected from households by the Bureau of the Census using the March Income Supplement of the Current Population Survey (CPS), which is jointly sponsored by the Bureau of the Census and BLS. Poverty statistics are published each year that allow comparisons of economic well-being across families, population groups, and regions and over time.

Thresholds for families of different size and composition were initially defined as three times the cost of a minimum diet for a family of that size. This approach was based on the finding of the U.S. Department of Agriculture’s (USDA) 1955 Household Food Consumption Survey that, on average, families of three or more persons spent one-third of their income on food. Costs of a minimum diet for various family sizes were calculated from USDA’s Economy Food Plan, the least costly food plan designed by USDA.² Since then, the poverty thresholds, of which there are currently 48, have been updated annually, to adjust for price inflation nationwide using the Consumer Price Index (CPI). In 1995—the year of the most recent update—a family of four with cash income of less than \$15,569 was considered to be living in poverty.

Criticisms of the Poverty Measure

The problems in the official measure of poverty are well documented. The value of the resources a family receives from noncash government assistance programs like the Food Stamp Program was never included in

²The original thresholds also considered sex of the family head and farm/nonfarm residence. In 1981, these distinctions were eliminated; also, thresholds were extended up to families of nine or more members.

the formal definition of income, in part because the poverty measure was developed before the advent of such programs. In considering the 1981 Commerce Department appropriations, the Senate Appropriations Committee criticized the official poverty statistics for ignoring the “billions of dollars of Government in-kind benefits, such as food stamps, housing subsidies and medical care.” In the conference committee report, the House and Senate conferees urged the Secretary of Commerce to “continue research and testing of techniques for assigning monetary values to in-kind benefits, and for calculating the impact of such benefits on income and poverty estimates.”³ In the early 1980s, the Bureau of the Census embarked upon research programs to examine the effects of both government in-kind (noncash) benefits and taxes on poverty and other measures of income distribution and has published the results since 1982.⁴

A 1990 review of concepts and approaches to measuring poverty concluded that although the official poverty thresholds “represented a reasonable approach, given existing data, . . . in the 1960s, the rather minimal consumption data on which they were based became outdated long ago.”⁵ For example, recent surveys find that food now represents about one-seventh rather than one-third of average family expenditures. In addition, the report noted that the methods used to update thresholds over time and to adjust for differences in family size and type were questionable and sometimes inconsistent.

In 1995, NRC’s Panel on Poverty and Family Assistance published an in-depth review of the U.S. poverty measure addressing concepts, measurement methods, and information needs. In addition to reviewing the literature and numerous experts’ views, with help from federal agencies, the panel conducted data analyses to assess the effects of its recommended poverty concept and alternative measures on the numbers and characteristics of persons in poverty. It concluded that the official measure of poverty required revision and recommended that OMB adopt a revised measure.⁶ Specifically, the panel recommended that new

³U.S. Senate Report No. 949, 96th Congress, 2nd Session, Sept. 16, 1980, p. 33; and U.S. House of Representatives Report No. 1472, 96th Congress, 2nd Session, Nov. 20, 1980, p. 9.

⁴See, for example, U.S. Department of Commerce, Bureau of the Census, Estimates of Poverty Including the Value of Noncash Benefits: 1984, Technical Paper 55 (Washington, D.C.: U.S. Government Printing Office (GPO), 1985); Measuring the Effect of Benefits and Taxes on Income and Poverty: 1990, CPR P-60, #176-RD (Washington, D.C.: GPO, 1991); and Poverty in the United States: 1995, CPR P-60, #194 (Washington, D.C.: GPO, 1996).

⁵Patricia Ruggles, Drawing the Line: Alternative Poverty Measures and Their Implications for Public Policy (Washington, D.C.: The Urban Institute Press, 1990), p. 164.

⁶Constance F. Citro and Robert T. Michael, eds., Measuring Poverty: A New Approach (Washington, D.C.: National Academy Press, 1995).

thresholds be developed using actual consumer expenditure data to represent a budget for basic needs and adjusting that budget to reflect the needs of different family types and geographic differences in housing costs. It recommended that family resources be redefined as the sum of money income and near-money benefits, minus necessary expenses (such as taxes), and thus the net amount available to buy the goods and services in that poverty budget. (App. I reproduces the panel's recommendations in their entirety, including some issues not discussed in this report.)

More recently, a researcher criticized the reliance of the official poverty measure on reported income, pointing out that some families are misidentified as poor because they can increase their purchasing power by either taking out loans or drawing on their savings to avoid material deprivation.⁷ He and others have suggested that a family's economic well-being is more appropriately assessed with a measure of what it spends on goods and services than with a measure of its income.

Issues in Assessing a Family's Economic Well-Being

In developing, as well as evaluating, a poverty measure, certain assumptions and choices must be made as one addresses two fundamental decisions: first, how to define a family's resources and, second, how to select a threshold, or standard, to represent a "minimally adequate standard of living." While the two decisions are distinct, the two definitions must be consonant with each other so that the eventual comparison of a family's resources with a standard is considered fair. For example, if government medical benefits are considered as part of a family's resources, then need for medical care should be considered in defining the threshold. Although many technical choices must be made in developing a valid and practical measure of family economic well-being for the purposes of determining poverty status, we identified three key choices to be made:

- whether to directly measure a family's spending on basic necessities or to use income and other economic resources as a proxy for its ability to buy those necessities,
- which economic resources should be considered available for meeting a family's basic needs, and
- whether existing data sources are adequate or should be modified to improve the reliability of poverty estimates.

⁷Nicholas Eberstadt, "A Poor Measurement," *Wall Street Journal*, Vol. CCXXVII, No. 79 (Apr. 22, 1996), p. A22, describes the research of Daniel T. Slesnick, including that reported in "Gaining Ground: Poverty in the Postwar United States," *Journal of Political Economy*, Vol. 101, No. 1 (1993), pp. 1-38.

Should Well-being Be Measured Through Spending or Economic Resources?

Some poverty researchers have proposed examining families' consumption of goods and services, rather than their income, to assess more directly whether they are able to obtain a minimal standard of living. Many on the NRC panel and some of the experts we interviewed were sympathetic with that view. The panel report noted that consumption is more closely related conceptually to material deprivation—the core concept underlying poverty—than is income. However, as we previously noted, efforts to directly measure material deprivation meet with both conceptual and practical difficulties. For example, some readily identified deprivations, such as loss of housing, may not result from low income but from imprudent spending or difficulties with one's landlord. And defining housing adequacy would require subjective judgments to select standards for living space; cooking and plumbing facilities; and heating and, perhaps, cooling needs. Even when expert-defined standards exist, assessing the nutritional adequacy of a family's diet, for example, would likely require a costly expert assessment and the collection of detailed data on family meals. Thus, measures of material deprivation are more often recommended as a supplement to, than as a replacement, for data on family resources.⁸

Instead, researchers who assess poverty status through consumption typically use as their measure the dollar value of a household's reported spending (excluding taxes, gifts, and savings). The primary source for these data is the Consumer Expenditure Survey (CEX), which collects detailed data from households on their expenditures. Because we do not know whether a family's level of expenditures is sufficient to meet its material needs, the dollar value of expenditures is really only a proxy for the family's level of material deprivation. However, some researchers still prefer to look at what families spend rather than their income because expenditures reflect what they were able to obtain with all their available economic resources (including savings, assets, and credit), whereas income is only a proxy for those resources.

There were mixed views in the field about whether income or expenditures were more conceptually consistent with the intended uses of the poverty measure. A perceived disadvantage of measuring family well-being with income is that it tends to overstate the material deprivation of families who experience a temporary economic setback and of those low-income families who can use savings to maintain their level of expenditures. But, precisely because families can smooth out the effects of

⁸See Maya Federman and others, "What Does It Mean to Be Poor in America?" *Monthly Labor Review* (May 1996) for an analysis of the living conditions and material deprivations reported by families with incomes below the poverty level in nine national surveys.

dips in income, expenditures tend to vary less among families and over time than income does. Thus, for policy planning and evaluation purposes, an expenditure-based measure might not be as sensitive an indicator of families' economic need as income would be. In contrast, a perceived advantage of measuring poverty with family income is that much of government antipoverty policy is expressed and analyzed in terms of change in total or disposable family income. If poverty was measured on the basis of expenditures, forecasting the effects of a change in economic policy would require estimating how the expected change in family income would affect a family's expenditures, which are more difficult to predict than income.

In the end, the NRC panel concluded, and experts we interviewed concurred, that, at least at present, measuring poverty for official purposes with expenditures was simply not feasible. The only available national survey of household expenditures, the CEX, is not currently appropriate for measuring poverty. Its sample size is too small to support the level of detail on demographic subgroups that we now obtain from the income surveys. Because the CEX is also expensive to administer and time consuming to process, experts considered it prohibitively costly to greatly expand the survey in its current form. Moreover, the panel reported concerns about its design and response rate that raised questions for them about its quality and appropriateness as a source for an expenditures-based poverty measure. For example, because estimates of different types of expenditures are currently derived from different samples answering different surveys, the panel had questions about how to obtain a comprehensive resource estimate for individual families. (App. II provides more detail on this survey.) Nevertheless, because the conceptual advantages of an expenditure measure of poverty have appeal, the NRC panel also recommended research into improving available expenditure data.

Which Economic Resources Should Be Counted as Available Toward Meeting a Family's Basic Needs?

For more than a decade, critics have pointed out that the official poverty measure's use of gross cash income does not fully represent the resources families actually have available to meet basic needs. Specifically, gross cash income excludes the value of in-kind benefits (like food stamps and public housing rental subsidies), which clearly increase the resources available for basic needs, and fails to account for taxes and payment of child support, which reduce available resources. Since the poverty measure was developed, there have been significant increases in payroll taxes and noncash government transfers for low-income families, as well

as significant changes in income taxes, so these omissions have become more problematic over time. The NRC panel believed that it was also critical to take into account both in-kind benefits and tax payments in order for the poverty measure to reflect the antipoverty effects of government tax and assistance policies.

We found disagreement among the experts, however, about how far to go in making these adjustments to cash income. The NRC panel recommended adding the value of near-cash, nonmedical in-kind benefits (such as food stamps, rental housing subsidies, school lunches, and home energy assistance) to families' gross money income and deducting income taxes, Social Security taxes, payment of child support, out-of-pocket medical expenditures, and child care and other work-related expenses (up to a limit). One of the panel members dissented from the panel's recommendations on how to incorporate out-of-pocket medical expenses and the value of public medical insurance (Medicaid and Medicare). Over the years, efforts to find a generally acceptable method for valuing public medical insurance have been unsuccessful, in part because the value of insurance to recipients depends on whether they need to use it. In addition, the dollar value of expenses covered by insurance can be so large that it exceeds the amount of money a low-income family has available for other needs, yet it cannot be spent on those needs. The panel's suggestion to deduct out-of-pocket medical expenses from income, instead of adding the value of insurance coverage to income, avoids ascribing unrealistically large amounts of resources to families who never made use of their insurance and those whose insurance covered unusually high expenses. But one panel member preferred to treat health care as another basic need such as food, shelter, and clothing, and incorporate out-of-pocket medical expenses as part of the family budget used to develop the thresholds.

Deciding which income adjustments to make also depends on how accurate these adjustments can be made, at reasonable expense. The Bureau of the Census, which has developed ways to approximate values for food and housing assistance received and taxes paid for the families that are surveyed to produce the poverty statistics, has used those figures to calculate adjusted poverty rates on an experimental basis. However, Bureau of the Census officials were not confident about the success of this approach for some of the other recommended income adjustments without expanding the CPS questionnaire. One expert stressed that if estimates are used, it is important that they accurately reflect the real choices made by lower-income families, because using average family expenditure values could introduce bias into the poverty estimates.

Another consideration raised by government officials in deciding whether and how to change the way family economic resources are officially defined for measuring poverty is the implications of such a change for those government programs that link receipt of assistance to the official poverty measure. Some programs determine eligibility, in part, by comparing an applicant's income with the poverty guidelines (which are derived from the thresholds) or some multiple of them. Poverty guidelines are issued annually by the U.S. Department of Health and Human Services (HHS) by smoothing the official poverty thresholds for different size families, increasing the levels for Alaska and Hawaii, and updating them for price inflation.

To aid coordination of assistance programs, it is preferable for programs to share a common definition of "income"; one way to simplify a program's application process is to limit its resource definition to gross monetary income, based on readily obtained information. The panel believed that its disposable income definition of family resources is a substantial improvement over the current measure, and so encouraged consideration of, but did not directly recommend, the use of this definition by programs that currently compare gross income to the administrative poverty guidelines. The panel recognized that, in programs that currently employ a fairly crude measure of gross income, implementing its proposed resource definition would require obtaining additional data on applicants' in-kind benefits and expenses. The panel also recognized that this could place a burden on both clients and administrators. As an alternative, the panel suggested that such programs could choose to use a simplified definition of disposable income if the programs were willing to give up some precision in determining eligibility status in order to minimize data burden.

Are Existing Data Sources Adequate or Should They Be Improved?

Part of the argument for using expenditures rather than income to measure a family's economic well-being is the claim that many apparently low-income households underreport their income. This claim is primarily based on the finding that in the single national household survey that collects extensive data on family expenditures (the CEX), low-income families report higher levels of expenditures than income.⁹ Although the Bureau of the Census acknowledges some income underreporting in the survey that is used to derive the official poverty statistics (the CPS), this problem is understood to be somewhat greater in the CEX, which was not specifically designed to measure income.

⁹In comments on an earlier draft, BLS suggested another explanation for this anomaly: some families that report low levels of income do so because of business income losses, yet they may have expenditure levels more typical of higher-income consumers.

The NRC panel recommended changing the data source for poverty statistics from the CPS to the Survey of Income and Program Participation (SIPP), which is also conducted by the Bureau of the Census. The CPS is basically a labor force survey that is supplemented in March of each year with a large battery of income questions used for measuring poverty. In contrast, the SIPP was specially designed as a survey of household income and, through both different questions and more frequent interviews, provides more detailed and more accurate data on income than the CPS. In addition, because the CPS survey does not collect certain data on expenses (notably taxes, child care, and child support payments), estimates of the likely value of such payments (that is, imputations) would be required to make some of the recommended income adjustments. In the absence of some of the information needed, the technical adequacy of the imputations becomes increasingly important. Thus, many experts prefer the SIPP because they believe it provides a more accurate report of income for low-income people and provides most of the information required for the additional income adjustments recommended by the panel. (App. II provides more detail on these surveys.)

Currently, the decennial census, due to its broad coverage, is the primary source of poverty rates for small areas such as cities and counties; yet, it does not gather the detailed information that would be required to implement the panel's proposed resource definition. Officials of the Bureau of the Census indicated that they have tested several limited questions in the National Content Survey (the main content-testing vehicle for the year 2000 census) on the receipt of in-kind benefits and payments for child support but that no expansions are planned to the census long-form questionnaire at this time. Thus, if the panel's definition of family resources was adopted, simulations would be required to produce comparable estimates from the census. Differences between estimates from the two surveys would likely result, but some comparability problems exist currently between poverty estimates derived from the CPS and the census.

Developments Since the NRC Report

OMB has not yet acted on the panel's recommendations to revise the poverty measure but has discussed forming an interagency working group with BLS, the Bureau of the Census, and other interested agencies to explore general issues in measuring income and poverty and consider alternative measures to be developed and tested. BLS has not yet begun a comprehensive study of how to improve the CEX as a tool to measure family resources for the purposes of determining their poverty status per

se, as the panel recommended, but awaits direction from OMB and additional funds to undertake such research. However, efforts are under way to address some of this survey's data quality problems that were noted by the panel.

Staff of the Bureau of the Census, in a joint project with BLS staff, have begun to examine the feasibility of implementing the panel's recommendations for a revised resource definition. After replicating the panel's procedures on the CPS, they concluded that "[t]he Panel's recommendation that resources be measured as disposable income places much faith in the Census Bureau's ability to expand data collection efforts or do better modeling in an environment in which small annual changes in poverty are perceived as important, since there is no national survey that currently collects all the information necessary to portray a family's poverty status under the proposed measure."¹⁰ Bureau of the Census staff report that researchers within the Bureau are currently examining nearly every dimension of the resource measure they employed (including the valuation of housing subsidies and imputation of work, child care, and out-of-pocket medical expenses) and are currently working on implementing the resource measure in the SIPP instead of the CPS.¹¹

In 1996, the sample design of the SIPP was changed in order to focus on collecting longitudinal information on change in families' income and behavior over time. As a result, the SIPP is no longer able to provide nationally representative estimates of family income each year. The Bureau of the Census has developed a proposal to supplement the SIPP's new sample design to ensure this survey's ability to provide national estimates from year to year, comparable to current practice. However, additional funds would be required for this new design. The Bureau is also considering an alternative process for conducting the 2010 decennial census that would involve collecting more detailed data from samples of respondents throughout a 10-year period rather than only once every 10 years. However, it is not clear at this time whether this process will be adopted and, if so, whether it would include the detailed information on family resources and expenses needed to implement a disposable income definition. Nevertheless, because government analysts are also just beginning to recognize the implications for existing surveys of the new reporting requirements of the 1996 welfare reform legislation, we believe it

¹⁰Thesia I. Garner and others, "Experimental Poverty Measurement for the 1990's," paper presented at the Allied Social Science meetings (New Orleans, La.: Jan. 4, 1997), pp. 28-29.

¹¹Kathleen Short, Martina Shea, and T.J. Eller, "Work Related Expenditures in a New Measure of Poverty," paper presented at the American Statistical Association meetings (Chicago, Ill.: Aug. 7, 1996).

is critical that all proposed changes to the SIPP and census be carefully coordinated.¹²

Issues in Updating the Poverty Thresholds

The current thresholds, or levels of income below which families of different sizes are considered poor, are based on family consumption patterns of 4 decades ago and contain certain logical inconsistencies. As a consequence, many experts believe that the thresholds should be revised, but there is less consensus on how to do so. Although many technical choices will need to be made in developing thresholds, we highlight four key choices:

- on what basis to set the level of a poverty threshold,
- whether to accommodate changes over time in standards of living as well as in prices,
- how to quantify the difference in need among families of different size and composition, and
- whether and how to accommodate geographical differences in the cost of living.

How Should an Appropriate Threshold Level Be Identified?

The NRC panel concluded that “[a]lthough judgement enters into nearly all aspects of the poverty measure . . . questions of the threshold concept and level are more inherently matters of judgment than other aspects of a poverty measure.”¹³ Many of the experts we interviewed believed that scientists should not set the poverty thresholds on their own but instead should provide information about what it means to live at one income level or another (in terms of expenditures or living conditions) and let policymakers make the judgment. That is, the poverty level is viewed as essentially an arbitrary point selected to represent what society defines as constituting a “minimally adequate standard of living.” However, the panel noted that several sources are available to inform the selection of a particular income level: public opinion on what level of income is believed necessary to “get along,” the distribution of family or household income, and poverty budgets that estimate what income levels families need to obtain basic necessities.

From 1946 to 1989, the Gallup poll has asked the following question: “What is the smallest amount of money a family of four (husband, wife, and two

¹²The Personal Responsibility and Work Opportunity Reconciliation Act of 1996, P.L. 104-193, was signed into law on Aug. 22, 1996.

¹³Citro and Michael, *Measuring Poverty*, p. 99.

children) needs each week to get along in this community?” Denton Vaughan’s 1993 analysis of these data found that the “get-along” amount, while remaining below the median level of post-tax income for four-person families, has increased over the years along with increases in median family income. In contrast, the official poverty level, in constant dollars, while similar to the “get-along” amount from 1947 to 1950, declined sharply thereafter relative to both median income and the “get-along” amount through the early 1970s. Vaughan concluded that the official poverty threshold, by remaining fixed while real incomes and expectations rose, “is no longer fully consistent with the standards of the American people.”¹⁴ The NRC panel recommended against using these or similar poll findings directly to set the poverty level because (1) responses are quite variable, both over time and with the exact wording of the question and (2) the knowledge that their response would be used to set the poverty standard (and thus, perhaps, benefit levels) might affect the way in which people respond. Indeed, a government official pointed out that precisely because these surveys did not directly ask what level of resources families should be guaranteed, these responses were not appropriate for setting guidelines that would determine public assistance benefit levels. However, opinion surveys were considered a valid way of tapping societal norms, so experts suggested that their results be used as a confirmatory source to help bracket figures derived from other sources.

Alternatively, poverty can be treated as a relative notion and the poor defined as all those with income below a particular point on the distribution of family or household income, such as the bottom fifth or those below a point representing 50 percent of the median income. This approach emphasizes the socially defined aspect of poverty, that “[t]hose whose resources are significantly below the resources of other members of society, even if they are able to eat and physically survive, are not able to participate adequately in their relationships, and therefore are not able to participate fully in society.”¹⁵ The NRC panel noted that relative thresholds are easy to understand and calculate, are thus often used in international comparisons of poverty, and are self-updating.

The panel also noted that some find the relative, arbitrary, and self-updating features of relative thresholds to be drawbacks, instead. For example, creating a purely relative poverty level (such as the bottom fifth

¹⁴Denton R. Vaughan, “Exploring the Use of the Public’s Views to Set Income Poverty Thresholds and Adjust Them Over Time,” *Social Security Bulletin*, 56(2) (summer 1993), p. 37.

¹⁵Citro and Michael, *Measuring Poverty*, p. 125. See also Peter Townsend, *The International Analysis of Poverty* (Hemel Hempstead, England: Harvester-Wheatsheaf, 1992).

of the distribution) was unappealing because it would mean that the statistic would no longer serve as a measure of progress against poverty. Every year, no matter how much family incomes improved, one fifth of the population would automatically be defined as poor. That problem can be avoided, however, by defining the threshold as a percentage of median income, which would not require a particular proportion of the population to be labeled as poor.

The third major approach to setting a poverty threshold is to develop some form of poverty budget based on expert judgment of families' needs, the observed expenditures of low-income families, or some combination of the two. Poverty budgets based on expert judgments "have the appeal of being based on the notion of minimum standards of physical needs," but "large elements of relativity and subjective judgment invariably enter the process" because few established standards exist to guide the choice of what to include in these budgets.¹⁶ The dilemma is that there are many different ways to meet basic nutritional needs, for example, but to cost out a poverty budget, the expert must select one nutritionally adequate diet over another, which requires subjective judgment. Therefore, in practice, experts must base their judgments on either their own beliefs about the needs of low-income families or on observations of families' spending patterns.

The primary choice in developing a poverty budget is whether to specify in detail a comprehensive poverty-level family budget or to cost out one or a few categories of spending that can then be multiplied by a factor to represent the rest of a family's needs. Comprehensive detailed budgets that attempt to mimic an entire family's budget have the advantage of appearing to be absolute rather than relative and provide a concrete picture of what it would look and feel like to live at that particular income level. But the experts also cautioned that a carefully detailed budget was very burdensome to create and required a substantial number of subjective judgments to justify (such as about what to include and at what cost).

In contrast, a budget based on specifying one or two budget categories, such as food, paired with a multiplier to cover the rest of a family's needs, is much simpler to create, but using a large multiplier can distort the measure over time if it is not reassessed. This is precisely what happened with the official poverty measure. The original formula (three times the cost of a poverty food budget) no longer reflects contemporary family

¹⁶Citro and Michael, *Measuring Poverty*, p. 107.

consumption patterns because costs of different budget categories have changed differentially. Food costs have not risen as much as other costs since the 1950s and standards of living have climbed, so food now represents about one-seventh rather than one-third of family budgets. Thus, a literal update of the original poverty measure would multiply the current cost of a poverty food budget by seven rather than by three.

To ground the thresholds in families' basic needs yet avoid the numerous judgments involved in detailing a comprehensive budget, the NRC panel recommended developing a budget for a four-person reference family for the three categories of food, clothing, and shelter needs from actual family expenditure data, along with a small multiplier to account for other needs. It recommended basing the budget on a fixed proportion of the median expenditures of two-adult, two-child families on these basic needs. It further recommended that that proportion and the multiplier be selected in concert with both expert judgment and public opinion concerning what constitutes a minimally acceptable standard of living. As one expert argued, since poverty is, in the end, a social construct, triangulation between threshold levels generated through expert judgment, family expenditure data, and public opinion polling is most likely to achieve the desired consensus.

Another consideration in deciding whether and how to revise the poverty thresholds is the implications of such a change for those government programs that link receipt of assistance to the administrative poverty guidelines. Some programs providing cash, in-kind benefits, or services to low-income persons have as one of their income eligibility criteria that their income be compared with the poverty guidelines or some multiple of them; others have their own income standards. Currently, the administrative poverty guidelines issued by HHS are a simplified version of the poverty thresholds. If changes to the poverty thresholds were made, OMB officials indicated that the administrative guidelines would not necessarily be affected, unless a separate decision was made that revised measures were more appropriate for those programs that use the guidelines. Nevertheless, even changing the level of these poverty guidelines would only have direct caseload and budget implications for some programs, and only if the newly eligible people applied for services. This is because only some of the programs that link eligibility to the poverty guidelines are entitlement programs, that is, they must provide benefits to all eligible applicants (for example, Medicaid, food stamps, School Lunch, and School Breakfast). In others, legislatively set budget limits determine how many eligible people who apply for services will

actually be assisted and how many will be put on waiting lists. The NRC panel recommended that program agencies carefully review the proposed measure to determine whether it is appropriate as an eligibility standard and whether it may need to be modified to better serve program objectives. “Other considerations, such as funding constraints and competing use of scarce tax dollars, may dictate that assistance program benefits be set at a level below the statistical poverty thresholds.”¹⁷

Should the Thresholds Accommodate Changes Over Time in Standards of Living as Well as in Prices?

No matter what level is selected to represent the income needed to purchase a “minimum adequate standard of living,” some mechanism is needed to maintain its currency over time. Currently, the thresholds are updated annually for price inflation, but we found mixed views on whether to also update them regularly for real changes in income levels or expenditures. As noted before, by not reestimating the food share of families’ budgets, the current method’s adjustment of the 1960s’ thresholds for price inflation alone is believed to have misestimated the effect of changes in the cost of living on the entire poverty budget.¹⁸

In support of routinely adjusting for changes in standards of living, the panel noted that, historically, the levels of estimated minimum standards—whether from expert budgets, programmatic standards, or public opinion polling—have in fact risen over time with real (that is, inflation-adjusted) growth in both income and consumer expenditures. Additionally, of course, it would be administratively simpler to have a routine mechanism for updating the thresholds, rather than wait until serious concerns arise to instigate a major reevaluation and revision. To keep the thresholds current, the NRC panel proposed updating them annually to reflect changes in median family expenditures on food, clothing, and shelter, with the amount averaged over the previous 3 years to reduce the thresholds’ volatility over the cycles of the economy.

However, other experts were concerned that such annual adjustments would turn the poverty measure into a relative standard that would no longer provide a stable target for assessing government programs’ progress. Moreover, they were concerned that, in the short run, a relative threshold tied to median income (or expenditures) could end up yielding perverse results. For example, in an economic recession, as median

¹⁷Citro and Michael, *Measuring Poverty*, p. 320.

¹⁸There have been discussions about moving the CPI toward a more comprehensive measure of cost of living, but it is too early to know whether such changes, if implemented, would address experts’ concerns.

expenditures declined, so would the poverty threshold, potentially leading to lower rather than higher poverty rates. NRC's proposed updating mechanism would not create a truly relative measure because the threshold would be updated on the basis of families' expenditures on food, clothing, and shelter, which represent about 45 percent of total expenditures for four-person households and do not tend to rise as fast as income. Additionally, updating thresholds with median expenditures averaged over the past 3 years would moderate the effect of year-to-year economic fluctuations.

How Should the Thresholds Reflect Differences in Need Among Families of Different Size?

Thresholds for different types of families were initially developed in an effort to ensure the equivalence of the poverty level, conceptually, across families whose different circumstances implied different needs. The USDA food plans were developed to reflect presumed differences in the food needs of children and elderly individuals and those of nonelderly adults, and the thresholds were developed to accommodate the economies of scale enjoyed by larger families compared with smaller ones. However, it was pointed out in 1990 that the initial equivalence scales (that is, the set of differences between thresholds for different families) were not entirely systematically based on variation in family consumption patterns and the data that were used are now out of date. Additionally, the scales exhibit some abnormalities in terms of natural economies of scale for different family sizes.

Analysts want the thresholds to reflect only those sources of variation in family needs for which empirical evidence of sizable systematic variation exists. While elderly people do have different consumption patterns from the nonelderly, evidence that the elderly have consistently lower income needs is limited. Thus, the panel proposed dropping the distinction made in the current method that provides a lower threshold for elderly individuals living alone than that for nonelderly adults. In response to a legal challenge, the distinction between female and male heads of households was removed in 1981.

A large body of research has developed a variety of approaches for creating equivalence scales to represent the variation in needs among different family types. However, no single approach can be clearly demonstrated to be more accurate than the others because of conceptual difficulties in assessing whether two families of different types are equally well-off. For example, although married couples with one child may spend less on food outside the home than those without children, we have no

measure of whether they are equally well-off. Thus, it is difficult to identify the extent of economies of scale from simply comparing different families' expenditure patterns. Moreover, in any consumption-based analysis, care must be taken to avoid simply institutionalizing the status quo. If larger families also tend to have lower incomes than smaller families, their smaller per capita spending could represent the effects of their lower income rather than lower needs.

In the absence of an objective procedure for determining the relative costs of living for families of different sizes and composition, the NRC panel proposed using a statistical formula to produce thresholds for various combinations of adults and children so that the resultant equivalence scale would at least be logical and internally consistent. The panel developed a formula reflecting the general form of the varied formulas in the literature, which treats the cost per child as a fixed proportion of the cost per additional adult and provides for the scale economies of larger families. It also made suggestions for the choice of the actual terms of the formula. These choices need to be carefully examined because, by raising or lowering the thresholds for different families from what they are now, the demographic profile of people defined as living in poverty can be substantially changed. For example, the panel found that applying one of the proposed scales while retaining the current threshold for a two-adult, two-child family would reduce the threshold for single people and thus increase the poverty rate for that group.

Should Thresholds Reflect Geographic Differences in Cost of Living and, if so, How?

Another important source of variation in family circumstances that affects the cost of meeting families' basic needs is geography. It has long been recognized that, "because some parts of the country have higher prices than other parts, families that live in relatively expensive areas actually may need higher incomes to maintain the same level of consumption as lower income families in less expensive places."¹⁹ The experts we interviewed agreed that it was conceptually appropriate to adjust the poverty thresholds to account for reliable differences across areas in the cost of living but were unsure about whether adequately reliable data would be available to do so. Another noted that such a change could cause the Congress to consider the effects that such a change would have on the distribution of funds to states and localities from federal programs whose distribution formulas currently consider the differences in poverty rates between areas.

¹⁹Ruggles, *Drawing the Line*, p. 82.

Long-standing data and conceptual problems have prevented any adjustment of poverty measures for geographic differences in cost of living in the past and may continue to do so. Currently, no standard index of comparative prices exists that reflects variation both within and across regions and that covers all areas of the country. Previous efforts to develop such an index have been stymied by lack of comprehensive and comparable price data on samples large enough to provide reliable estimates for areas within regions, as well as by the problem of how to adjust for differences in local preferences or standards of living. That is, while it seems reasonable to account for differences in types of expenditures that are directly related to the climate, such as heating costs, some other differences, such as food preferences, may also represent differences in quality that are related to differences in income levels between areas.

As an alternative to a comprehensive interarea price index, the NRC panel proposed adjusting the poverty thresholds with an interarea price index for shelter, because shelter costs show considerable geographical variation and are a major component of consumer spending. The NRC panel proposed developing an interarea housing cost index for metropolitan areas of various population sizes within nine regions and developed an experimental one themselves, using a modified version of the “fair market rent” methodology developed by the U.S. Department of Housing and Urban Development (HUD). To administer rental housing subsidies, HUD sets “fair market rents” at the 45th percentile of the rent distributions in metropolitan areas and nonmetropolitan counties for apartments that meet specified quality standards and that are occupied by recent movers.²⁰ The NRC panel applied this methodology to rental housing data from the 1990 census to develop index values for metropolitan and nonmetropolitan areas. We previously reported, however, that experts have criticized the use of the HUD method for creating an interarea price index for adjusting poverty thresholds because HUD’s estimates do not cover all types of rental housing; fail to adjust for interarea differences in the quality of housing; and, of course, capture only one component of the cost of living.²¹

While experts agreed it was rationally justified to adjust the thresholds for geographic cost-of-living differences, we found little consensus on which methodology would be both reasonably accurate and practical for creating

²⁰The data sources for the HUD rent distributions include the decennial census, the American Housing Survey, and local-area random digit dialing telephone surveys.

²¹Poverty Measurement: Adjusting for Geographic Cost-of-Living Difference (GAO/GGD-95-64, Mar. 9, 1995).

and maintaining such an index. One concern is that no single data source, including the decennial census, had both adequately reliable data on metropolitan and nonmetropolitan areas within regions and the detail on housing characteristics required to accurately distinguish differences in prices from those in quality. Another concern is that housing prices may differ as much within metropolitan areas as they do between them. Moreover, because housing markets can experience large changes within a 10-year period, developing a method to produce reliable updates between decennial censuses is important to ensure that the geographic adjustments do not create more error than they were intended to reduce. However, there was no consensus among the experts we interviewed that a solution to the periodic updating problem had been found.

Developments Since the NRC Report

Staff of BLS, in a joint project with the Bureau of the Census, have begun exploratory work to examine the feasibility of implementing the panel's proposals for developing poverty thresholds should they be asked to do so. Applying the panel's recommended procedures to expenditure data from 1987 to 1994, they found the thresholds seem to be stable over time. However, in testing alternative valuation procedures, they found that replacing a homeowner's shelter costs with a rental equivalence value produced higher thresholds and thus higher poverty rates.²² They report that BLS researchers are currently examining (or planning to examine) numerous issues related to the panel's recommendations, including other methods to estimate the service flows from owned housing and vehicles, the impact of using data from consumer units reporting a full year of expenditures, and which Consumer Price Index to use to update the basic bundle of expenditures.

Professor David Betson, a member of the panel, has continued research on the evidence underlying the current and alternative equivalence scales and the consequences of alternative scales for who is considered poor. In a preliminary summary, he reports that several different sets of scales are consistent with the research on spending on children but yield quite different results for single adults. Yet, with limited research evidence on the scale relating one and two adults, additional research will be required to choose among these scales.²³

²²Thesia I. Garner and others, "Experimental Poverty Measurement."

²³David M. Betson, "Is Everything Relative? The Role of Equivalence Scales in Poverty Measurement" (unpublished paper, dated March 1996, available from the author at the Department of Economics, University of Notre Dame, South Bend, Ind.).

Additionally, BLS has been conducting some experimental work on interarea indexes of price differences that may help resolve concerns regarding the quality of available data for adjusting the thresholds for geographical differences in the cost of living. Specifically, BLS is using sophisticated statistical techniques to isolate the relative differences in prices among geographic locations when, as is done in developing the CPI, price information is collected for similar but not identical items across localities. If these techniques are deemed successful, an interarea price index could be developed and regularly updated from BLS' existing data sources. However, the CPI sample would still need to be increased to produce estimates for rural areas.

Conclusions

Some of the issues involved in updating the poverty measure seem to be fairly well resolved in the scientific community. Although a family's economic resources are only a proxy for its ability to obtain an adequate standard of living, they clearly provide the most reliable data for assessing and comparing families' ability to meet their needs. Similarly, we found agreement that the measure of a family's economic resources should include near-money government benefits and exclude income and payroll taxes.

But additional discussion and research may be needed for experts to reach consensus on other issues, such as how to incorporate government medical assistance in a measure of disposable income and how to accommodate geographical differences—and changes—in the cost of living. Even though some adjustments are clearly preferable conceptually, not all will be considered worth the effort and expense required.

Updating the thresholds, in contrast, poses issues for which scientific evidence can only bracket a set of alternatives. Determining what constitutes a minimally adequate standard of living is, in essence, a social judgment that should reflect both societal and experts' views. A broader discussion would also seem to be appropriate for the issue of whether to incorporate changes over time in standards of living as well as in prices.

Agency Comments and Our Response

The Bureau of the Census, within the U.S. Department of Commerce; BLS, within the Department of Labor; and the Office of Information and Regulatory Affairs (OIRA), within OMB, provided written comments on a draft of this report. Both OIRA and the Bureau of the Census stated that the report was a good summary of the important issues regarding

improvements in the official measure of poverty. But OIRA also believed that in considering these issues, it should also be noted that broadening the definition of income to include noncash transfers and the net effect of direct taxes is bound to lower the measured poverty rate unless the thresholds are adjusted to reflect a higher level of economic well-being. Each agency provided some technical comments and corrections that we have incorporated, as appropriate, throughout the text. BLS focused its comments on issues surrounding the use of the CEX. BLS noted that it is engaged in ongoing efforts to improve the CEX collection instrument to ensure that its data are of the highest quality but thought criticism of it was overstated in several places. We have changed the text to clarify that these comments pertained to use of the survey to measure individual families' economic well-being, a purpose outside its current mission. The agencies' comments appear in appendixes III, IV, and V.

We are sending copies of this report to the Chairman, Senate Committee on Finance; the Secretary of Commerce and the Director of the Bureau of the Census; the Secretary of Labor and the Commissioner of BLS; the Director of OMB and the Administrator of the Office of Information and Regulatory Affairs; and interested congressional committees. We will also make copies available to others on request.

If you have any questions concerning this report or need additional information, please call me on (202) 512-7215 or Stephanie Shipman, Assistant Director, on (202) 512-4041.

Sincerely yours,



Jane L. Ross
Director, Income Security Issues

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Abbreviations

BLS	Bureau of Labor Statistics
CEX	Consumer Expenditure Survey
CPI	Consumer Price Index
CPS	Current Population Survey
GPO	Government Printing Office
HHS	Department of Health and Human Services
HUD	Department of Housing and Urban Development
NRC	National Research Council
OIRA	Office of Information and Regulatory Affairs
OMB	Office of Management and Budget
SIPP	Survey of Income and Program Participation
USDA	Department of Agriculture
WIC	Special Supplemental Food Program for Women, Infants and Children

Recommendations of the National Research Council's Panel on Poverty and Family Assistance

Reprinted with permission from C. Citro and R. Michael, eds., Measuring Poverty: A New Approach (Washington, D.C.: National Academy Press, 1995), pp. 4-15.

Recommendation 1.1

The official U.S. measure of poverty should be revised to reflect more nearly the circumstances of the nation's families and changes in them over time. The revised measure should comprise a set of poverty thresholds and a definition of family resources—for comparison with the thresholds to determine who is in or out of poverty—that are consistent with each other and otherwise statistically defensible. The concepts underlying both the thresholds and the definition of family resources should be broadly acceptable and understandable and operationally feasible.

Recommendation 1.2

On the basis of the criteria in Recommendation 1.1, the poverty measure should have the following characteristics:

- 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).
- A threshold for a reference family type should be developed using actual consumer expenditure data and updated annually to reflect changes in expenditures on food, clothing, and shelter over the previous 3 years.
- The reference family threshold should be adjusted to reflect the needs of different family types and to reflect geographic differences in housing costs.
- Family resources should be defined—consistent with the threshold concept—as the sum of money income from all sources together with the value of near-money benefits (e.g., food stamps) that are available to buy goods and services in the budget, minus expenses that cannot be used to buy these goods and services. Such expenses include income and payroll taxes, child care and other work-related expenses, child support payments to another household, and out-of-pocket medical care costs, including health insurance premiums.

Recommendation 1.3

The U.S. Office of Management and Budget should adopt a revised poverty measure as the official measure for use by the federal government. Appropriate agencies, including the Bureau of the Census and the Bureau

of Labor Statistics, should collaborate to produce the new thresholds each year and to implement the revised definition of family resources.

Recommendation 1.4

The Statistical Policy Office of the U.S. Office of Management and Budget should institute a regular review, on a 10-year cycle, of all aspects of the poverty measure: reassessing the procedure for updating the thresholds, the family resource definition, etc. When changes to the measure are implemented on the basis of such a review, concurrent poverty statistics series should be run under both the old and new measures to facilitate the transition.

Recommendation 2.1

A poverty threshold with which to initiate a new series of official U.S. poverty statistics should be derived from Consumer Expenditure Survey data for a reference family of four persons (two adults and two children). The procedure should be to specify a percentage of median annual expenditures for such families on the sum of three basic goods and services—food, clothing, and shelter (including utilities)—and apply a specified multiplier to the corresponding dollar level so as to add a small amount for other needs.

Recommendation 2.2

The new poverty threshold should be updated each year to reflect changes in consumption of the basic goods and services contained in the poverty budget: determine the dollar value that represents the designated percentage of the median level of expenditures on the sum of food, clothing, and shelter for two-adult/two-child families and apply the designated multiplier. To smooth out year-to-year fluctuations and to lag the adjustment to some extent, perform the calculations for each year by averaging the most recent 3 years' worth of data from the Consumer Expenditure Survey, with the data for each of those years brought forward to the current period by using the change in the Consumer Price Index.

Recommendation 2.3

When the new poverty threshold concept is first implemented and for several years thereafter, the Census Bureau should produce a second set of poverty rates for evaluation purposes by using the new thresholds updated only for price changes (rather than for changes in consumption of the basic goods and services in the poverty budget).

Recommendation 2.4

As part of implementing a new official U.S. poverty measure, the current threshold level for the reference family of two adults and two children (\$14,228 in 1992 dollars) should be reevaluated and a new threshold level established with which to initiate a new series of poverty statistics. That reevaluation should take account of both the new threshold concept and the real growth in consumption that has occurred since the official threshold was first set 30 years ago.

Recommendation 3.1

The four-person (two adult/two child) poverty threshold should be adjusted for other family types by means of an equivalence scale that reflects differences in consumption by adults and children under 18 and economies of scale for larger families. A scale that meets these criteria is the following: children under 18 are treated as consuming 70 percent as much as adults on average; economies of scale are computed by taking the number of adult equivalents in the family (i.e., the number of adults plus 0.70 times the number of children), and then by raising this number to a power of from 0.65 to 0.75.

Recommendation 3.2

The poverty thresholds should be adjusted for differences in the cost of housing across geographic areas of the country. Available data from the decennial census permit the development of a reasonable cost-of-housing index for nine regions and, within each region, for several population size categories of metropolitan areas. The index should be applied to the housing portion of the poverty thresholds.

Recommendation 3.3

Appropriate agencies should conduct research to determine methods that could be used to update the geographic housing cost component of the poverty thresholds between the decennial censuses.

Recommendation 3.4

Appropriate agencies should conduct research to improve the estimation of geographic cost-of-living differences in housing as well as other components of the poverty budget. Agencies should consider improvements to data series, such as the BLS area price indexes, that have the potential to support improved estimates of cost-of-living differences.

Recommendation 4.1

In developing poverty statistics, any significant change in the definition of family resources should be accompanied by a consistent adjustment of the poverty thresholds.

Recommendation 4.2

The definition of family resources for comparison with the appropriate poverty threshold should be disposable money and near-money income. Specifically, resources should be calculated as follows:

- estimate gross money income from all public and private sources for a family or unrelated individual (which is income as defined in the current measure);
- add the value of near-money nonmedical in-kind benefits, such as food stamps, subsidized housing, school lunches, and home energy assistance;
- deduct out-of-pocket medical care expenditures, including health insurance premiums;
- deduct income taxes and Social Security payroll taxes;
- for families in which there is no nonworking parent, deduct actual child care costs, per week worked, not to exceed the earnings of the parent with the lower earnings or a cap that is adjusted annually for inflation;
- for each working adult, deduct a flat amount per week worked (adjusted annually for inflation and not to exceed earnings) to account for work-related transportation and miscellaneous expenses; and
- deduct child support payments from the income of the payer.

Recommendation 4.3

Appropriate agencies should work to develop one or more “medical care risk” indexes that measure the economic risk to families and individuals of having no or inadequate health insurance coverage. However, such indexes should be kept separate from the measure of economic poverty.

Recommendation 5.1

The Survey of Income and Program Participation should become the basis of official U.S. income and poverty statistics in place of the March income supplement to the Current Population Survey. Decisions about the SIPP design and questionnaire should take account of the data requirements for producing reliable time series of poverty statistics using the proposed definition of family resources (money and near-money income minus certain expenditures). Priority should be accorded to methodological research for SIPP that is relevant for improved poverty measurement. A particularly important problem to address is population undercoverage, particularly of low-income minority groups.

Recommendation 5.2

To facilitate the transition to SIPP, the Census Bureau should produce concurrent time series of poverty rates from both SIPP and the March CPS by using the proposed revised threshold concept and updating procedure and the proposed definition of family resources as disposable income. The concurrent series should be developed starting with 1984, when SIPP was first introduced.

Recommendation 5.3

The Census Bureau should routinely issue public-use files from both SIPP and the March CPS that include the Bureau's best estimate of disposable income and its components (taxes, in-kind benefits, child care expenses, etc.) so that researchers can obtain poverty rates consistent with the new threshold concept from either survey.

Recommendation 5.4

Appropriate agencies should conduct research on methods to develop poverty estimates from household surveys with limited income information that are comparable to the estimates that would be obtained from a fully implemented disposable income definition of family resources.

Recommendation 5.5

Appropriate agencies should conduct research on methods to construct small-area poverty estimates from the limited information in the decennial census that are comparable with the estimates that would be obtained under a fully implemented disposable income concept. In addition, serious consideration should be given to adding one or two questions to the decennial census to assist in the development of comparable estimates.

Recommendation 5.6

The Bureau of Labor Statistics should undertake a comprehensive review of the Consumer Expenditure Survey to assess the costs and benefits of changes to the survey design, questionnaire, sample size, and other features that could improve the quality and usefulness of the data. The review should consider ways to improve the CEX for the purpose of developing poverty thresholds, for making it possible at a future date to measure poverty on the basis of a consumption or expenditure concept of family resources, and for other analytic purposes related to the measurement of consumption, income, and savings.

Recommendation 6.1

The official poverty measure should continue to be derived on an annual basis. Appropriate agencies should develop poverty measures for periods that are shorter and longer than a year, with data from SIPP and the Panel Study of Income Dynamics, for such purposes as program evaluation. Such measures may require the inclusion of asset values in the family resource definition.

Recommendation 6.2

The official measure of poverty should continue to use families and unrelated individuals as the units of analysis for which thresholds are defined and resources aggregated. The definition of "family" should be broadened for purposes of poverty measurement to include cohabiting couples.

Recommendation 6.3

Appropriate agencies should conduct research on the extent of resource sharing among roommates and other household and family members to determine if the definition of the unit of analysis for the poverty measure should be modified in the future.

Recommendation 6.4

In addition to the basic poverty counts and ratios for the total population and groups—the number and proportion of poor people—the official poverty series should provide statistics on the average income and distribution of income for the poor. The count and other statistics should also be published for poverty measures in which family resources are defined net of government taxes and transfers, such as a measure that defines income in before-tax terms, a measure that excludes means-tested government benefits from income, and a measure that excludes all government benefits from income. Such measures can help assess the effects of government taxes and transfers on poverty.

Recommendation 7.1

Agencies responsible for federal assistance programs that use the poverty guidelines derived from the official poverty thresholds (or a multiple) to determine eligibility for benefits and services should consider the use of the panel's proposed measure. In their assessment, agencies should determine whether it may be necessary to modify the measure—for example, through a simpler definition of family resources or by linking eligibility less closely to the poverty thresholds because of possible budgetary constraints—to better serve program objectives.

Recommendation 8.1

The states should consider linking their need standard for the Aid to Families With Dependent Children program to the panel's proposed poverty measure and whether it may be necessary to modify this measure to better serve program objectives.

The CEX, CPS, and SIPP Surveys

The following is a summary of the description of the three surveys in Citro and Michael, *Measuring Poverty*, pp. 391-420.

The Consumer Expenditure Survey (CEX) is a continuing survey of households that primarily collects data on consumer expenditures through a quarterly Interview Survey and a 2-week Diary Survey about the U.S. civilian noninstitutionalized population, including military in civilian housing, students in college housing, and group homes. The CEX is sponsored by the Bureau of Labor Statistics (BLS) and conducted by the Bureau of the Census. The Interview Survey sample size is 6,800 consumer units interviewed in-person at 3-month intervals for 5 quarters; each month, one-fifth of the sample is new, and one-fifth is completing its final interview. The Diary Survey sample is an additional 6,000 consumer units, each of which records daily expenditures for 2 consecutive weeks. Consumer units are defined as a single person living alone or sharing a household with others but financially independent; family members sharing a household; two or more persons living together who share responsibility for two of three major expenses—food, housing, and other expenses. The respondent is any member of the consumer unit aged 16 or older with most knowledge of the unit's finances. BLS makes use of data from both the Interview and Diary Surveys to develop a total picture of expenditures. Researchers who analyze expenditure data typically work with the Interview Survey, from which users can construct annual data on expenditures and income.

The CEX Interview Survey includes data on demographic characteristics and work experience and job characteristics in the prior 12 months of unit members aged 14 and over. Detailed expenditure data are collected quarterly on rent, housing assistance subsidies, mortgage and home equity loan payments, and other home ownership costs such as condominium fees; expenses of telephone, utilities, and fuels, and home and household equipment maintenance and repair; purchases of household equipment, appliances, furnishings, clothing, watches, and jewelry; lease payments for and purchases of vehicles; vehicle maintenance, repair, parts and accessories, licensing, and other operating expenses; premiums for health and other insurance; coverage by Medicaid and Medicare; medical and health expenditures and reimbursements; educational expenses; trips and their expenses; and gifts for people outside the family. Global or usual expenditures are obtained for books, subscriptions, membership, and entertainment expenses; expenses for supermarkets and food stores, liquor, tobacco, and food away from home; food stamp benefits and other meals provided free; selected services and goods (for example,

laundromats); miscellaneous expenses (including babysitting); and occupational expenses and contributions (including alimony, child support, and charitable contributions). An inventory is taken of major household appliances and features of the dwelling unit, including descriptions of each owned property, and the rental value of the owned home. Data are obtained on financial assets, including credit balances and finance charges paid, and changes in financial assets. Data on income for the prior 12 months are obtained on wages, self-employment, Social Security, and Supplemental Security Income for each member aged 14 and over; and, for the household as a whole, on workers' compensation and veterans' benefits, public assistance, and interest and dividend income; income from trusts, pensions, and annuities; net income or loss from roomers or rental property; and income from alimony, child support, or other contributions from persons outside the consumer unit. Data are also obtained on taxes paid through paycheck deductions, additional federal and state income taxes, property and other taxes, and other taxes not reported elsewhere (sales taxes are included in the component expenditures).

The Current Population Survey (CPS) is a monthly survey of households that collects primarily labor force data about the U.S. civilian noninstitutionalized population. BLS sponsors the core of the CPS, which is designed to provide monthly unemployment rates. The Bureau of the Census sponsors the March Income Supplement to the CPS, in which respondents are asked supplementary questions about money income received in the previous calendar year. The CPS sample size is about 60,000 households; households are considered in the sample for 4 months, out of the sample for 8 months, and in again for 4 months. The sample is updated continually to account for new residential construction and periodically to incorporate information from the decennial census. The March CPS supplement includes military people living in civilian housing and an additional sample of 2,500 housing units that contained at least one adult of Hispanic origin as of the preceding November interview.

The core CPS interview elicits information on demographic characteristics and labor force participation (such as hours worked, reason for part-time work, industry, and occupation in which subjects worked in the prior week, usual hours, and usual earnings). The March CPS supplement includes information on labor force participation and job history in the prior calendar year for each household member aged 15 or older; private and public health insurance coverage; annual income for each household member aged 15 or older by detailed source—about 30 types of regular

cash income, including wages and salaries; net self-employment income; Social Security and other government program cash benefits; child support; alimony; private, government, and military pensions; retirement and insurance payments; money from relatives or friends; interest and dividend income; and Pell grants and other educational financial aid; and participation in noncash benefits programs, such as energy assistance, food stamps, public housing, and School Lunch.

The Survey of Income and Program Participation (SIPP) is a continuing panel survey conducted and sponsored by the Bureau of the Census. The sample covers the U.S. civilian noninstitutionalized population and members of the armed forces living off post or with their families on post. The reporting unit is the household, and the respondents are household members aged 15 or older. Up until 1996, each sample of households (panel) was interviewed every 4 months for 32 months, and the sample size varied from 12,500 to 23,500 households per panel; new panels were introduced every year. Under the SIPP's current design, a new panel will be introduced every 4 years (that is, with no overlap across panels) and interviewed every 4 months for 48 months, and the panel size will be increased to 37,000 households.

The current SIPP core interview elicits the following: demographic characteristics; monthly information on labor force participation, job characteristics, and earnings; monthly information on public and private health insurance coverage; detailed monthly information on sources and amounts of income from public and private transfer payments and on noncash benefits; and information for the 4-month period on income from assets. In total, about 65 separate sources of cash income are identified for each household member aged 15 or over, together with benefits from 7 in-kind programs; for a few sources, annual amounts are obtained in special interview supplements called "topical modules." Data are also collected, once or twice in each panel, on a wide range of subjects, including annual income and income taxes; educational financing and enrollment; eligibility for selected programs (including expenditures on shelter, out-of-pocket medical care costs, and dependent care); housing costs and financing; individual retirement accounts; and wealth (assets, including property, and liabilities).

Comparisons Between the CPS and SIPP

The SIPP obtains somewhat more detailed information on topics relevant to measuring poverty than the CPS does. For example, the March CPS supplement asks no questions about any type of tax payment. The Bureau

of the Census, instead, models federal and state income taxes and payroll taxes of each household for its experimental poverty estimates. The SIPP includes twice for each panel questions about tax payments for the previous year. However, its questions on such topics as tax liability and adjusted gross income have high nonresponse rates, primarily because only one-third of respondents use their tax forms to answer the questions, as they are asked to do. In addition, the CPS asks whether a household received benefits from the School Lunch Program or housing assistance the previous year but asks about the amounts received only for food stamps and energy assistance. The SIPP, on the other hand, obtains monthly information on the number of people who receive and benefit amounts for food stamps and the Special Supplemental Food Program for Women, Infants and Children (WIC); information every 4 months about energy assistance and the School Lunch and Breakfast programs; and information twice a panel about public housing and subsidized housing. Finally, whereas the CPS does not ask questions about expenses for medical care or child care, the SIPP obtains detailed information on these at least once each panel.

The National Research Council (NRC) panel, in reviewing research on data quality in the two surveys, found that the SIPP is favored on some indicators, such as item nonresponse rates and amounts of Social Security and other income types collected (in comparison with independent estimates), while the March CPS supplement fares better on household nonresponse rates and the amount of wages and salaries collected. Citro and Michael report that “[o]verall, however, SIPP appears to be doing a better job at measuring income, particularly at the lower end of the income distribution. SIPP’s more frequent interviews and detailed probing for receipt of different income sources appear to be identifying more recipients of many income types than the March CPS, although the dollar amounts reported are not always more complete in SIPP than in the CPS.”²⁴ As a consequence, SIPP poverty estimates are consistently several points below those from the March CPS. In addition, the panel and Bureau of the Census officials we interviewed felt that the SIPP, because of its focus on income and program participation, was in a better position than the CPS to provide both higher quality information on income and the other information on family expenditures needed for a revised definition of family resources for measuring poverty.

²⁴Citro and Michael, *Measuring Poverty*, p. 411.

Comments From the Bureau of Labor Statistics

U. S. Department of Labor

Commissioner for
Bureau of Labor Statistics
Washington, D. C. 20212



FEB 26 1997

Ms. Jane L. Ross, Director
Income Security Issues
General Accounting Office
Washington, D.C. 20548

Dear Ms. Ross:

Thank you for the opportunity to comment on the Poverty Measurement Report: Issues in Revising and Updating the Official Definition. We offer the following comments for your consideration.

Although it is true that, with current resources, the Bureau of Labor Statistics cannot support the full spectrum of research recommended by the panel (page 19), we are engaged in ongoing efforts to improve both the collection instrument and our publications, with the goal of ensuring that the Consumer Expenditure Survey (CEX) data are of the highest quality. One important limitation of the CEX has been the small survey sample size. The President's Fiscal Year 1998 budget includes the first year of funding for a proposal designed to strengthen the underpinnings of the Consumer Price Index. Among other things, the proposal includes a 50 percent increase in the size of the CEX sample.

We do not fully understand the comment that "because there has not been as much research on the CEX as on the income surveys, there are many questions about its quality and appropriateness as a source for poverty measurement" (page 13). Numerous researchers, both within and outside of the Bureau, have analyzed the quality of CEX income data and the use of CEX data for poverty measurement. The attachment to this memo lists recent studies of which we are aware.

The report states that the main evidence that low-income households underreport their income is the fact that "in a single national household survey that collects extensive data on family expenditures (the CEX), low-income families report higher levels of expenditures than income" (page 17).

Now on p. 11.

Now on p. 8.

Now on p. 10.

**Appendix III
Comments From the Bureau of Labor
Statistics**

Ms. Jane L. Ross--2

FEB 26 1997

Research performed by two members of the CEX staff -- John Rogers and Maureen Gray, "CE Data: Quintiles of Income Versus Quintiles of Outlays," *Monthly Labor Review*, December, 1994 -- provides a different perspective on this issue. Their report states that "...some consumer units report income losses from a business they own, which may result in low or negative incomes, even if they report income from other sources. Because these consumer units may have expenditure levels that are more typical of higher income consumers, the losses they report affect both the average income and the average expenditures of the lower income classes. Specifically, their low or negative incomes may depress the average income level, while their higher expenditures raise the average expenditure level. These consumer units are not what are considered to be typical low-income consumers." (page 33)

The report also indicates that income underreporting is much more serious in the CEX than in the CPS (page 18). Although it is true that the CEX was not specifically designed to measure income, the data from the two surveys are less different than this comment might suggest. Comparisons show that CEX average income is about 90 percent of CPS average income (see CE Bulletin 2462, which reports data for 1992-93) and the income distributions derived from the two surveys are similar (see Johnson and Smeeding (1997) and Groen and Sabelhaus (1997)). Census imputes values for missing CPS income components (due to nonresponse to particular income questions) based on demographic characteristics. In contrast, CE estimates are for complete income reporters only; income data are not imputed as part of the estimation procedure. Neither survey accounts for underreporting of particular categories of income by individual survey respondents. Research is underway at BLS to examine a procedure for imputing missing income values due to nonresponse. The articles by Paulin et al in the attachment provide additional information.

Now on p. 10.

**Appendix III
Comments From the Bureau of Labor
Statistics**

Ms. Jane L. Ross--3

FEB 26 1997

We also have a few minor technical comments on the report, as follows:

- The expenditure data that were used in the joint BLS-Census project to test implementing the Panel's recommendations for thresholds were from 1987-1994, not from 1992-1994. (pg. 36)
- In discussing the paper on the results of this joint project, the report states "...they found that replacing a homeowner's shelter costs with a rental equivalence value produced a large difference in the thresholds, and thus poverty rates." We feel it would be more accurate to say "...they found that replacing a homeowner's shelter costs with a rental equivalence value produced higher thresholds and thus higher poverty rates." (pg. 36)
- The appendix contains descriptions of SIPP and CPS. We would like the description of the CEX survey, found on pages 391-395 of the NRC report, added as well.

We would be happy to discuss our comments with you at any time.

Sincerely yours,



KATHARINE G. ABRAHAM
Commissioner

Now on p. 21.

Now on p. 21.

Added to app. II.

Comments From the Bureau of the Census



UNITED STATES DEPARTMENT OF COMMERCE
Bureau of the Census
Washington, DC 20233-0001

OFFICE OF THE DIRECTOR

February 26, 1997

Ms. Jane L. Ross
Director, Income Security Issues
Health, Education, and Human Services Division
General Accounting Office
Washington, DC 20548

Dear Ms. Ross:

Thank you for the opportunity to comment on the draft GAO report *Poverty Measurement: Issues in Revising and Updating the Official Definition*. Overall, the report is a good summary of the important issues regarding improvements in the official measure of poverty. The discussion is clear and readable. The issues are discussed in a direct and straightforward way. There is perhaps too much emphasis given to using consumption data over income data for a resource measure, at the expense of discussion of equally relevant issues, but that is understandable given Senator Moynihan's original request. There is also relatively little discussion of the work that Census and others outside the Bureau of Labor Statistics are doing. Some detailed comments follow:

Now on p. 1.

Page 1, paragraph 1, delete last sentence. Many criticisms and suggested improvements have been made, not just by this one researcher.

Now on p. 3.

Page 5, paragraph 1, insert [] to "The Bureau of the Census has developed plans to modify one of its surveys so it would be able to provide [more] reliable statistics using a revised family resource definition" [and is also investigating some of the panel's other recommendations].

Now on p. 4.

Page 7, paragraph 1, insert [] to "Since then, the poverty thresholds, of which there are currently 48, have been updated annually, to adjust for price inflation nationwide" [using the Consumer Price Index].

Now on p. 6.

Page 9, paragraph 2, the paragraph which begins "More recently, ..." should be moved to the section beginning on page 11 where this issue is discussed in full. It is confusing here.

Now on p. 11.

Page 19, paragraph 1, delete sentence that begins "Although the Bureau of the Census ..." and replace with "The Bureau of the Census has tested several limited questions in the National Content Survey (the main content testing vehicle for the 2000 census) on the receipt of in-kind benefits and payments for child support; however, no expansions are planned to the long-form questionnaire at this time."

Appendix IV
Comments From the Bureau of the Census

Ms. Jane L. Ross

2

Now on p. 11.

Page 19, paragraph 2, begin this section with a summary statement about the panel's recommendations for OMB's role. Insert [] to first sentence, "OMB has not yet acted on the panel's recommendations to revise the poverty measure, but has discussed forming an interagency working group with [the Bureau of the Census, BLS, and other interested agencies] to consider the panel's proposals."

Now on p. 11.

Page 19, paragraph 2, the next sentence should begin a new paragraph, and this paragraph should be moved to the end of the section on Developments Since the NRC Report on page 21. In the sentence that begins "BLS has not yet begun a comprehensive...", replace the phrase "...defining poverty per se..." with "...measuring resources per se..."

Now on p. 12.

Page 20, paragraph 1, add citation in last sentence, *Kathleen Short, Martina Shea, and Teresa Eller, "Work-related Expenditures in a New Measure of Poverty." Paper presented at American Statistical Association Meetings held in Chicago, IL, August 1996.*

Now on p. 12.

Page 20, paragraph 2, first sentence, insert [] to "In 1996, the sample design of the SIPP was changed in order to [focus on collecting] longitudinal information on change in families' income and behavior over time."

Now on p. 12.

Page 20, paragraph 2, in the sentence beginning "The Bureau of the Census has developed...", replace the word "amend" with "supplement."

Now on p. 21.

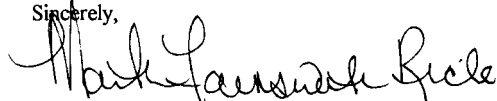
Page 36, section on Developments Since the NRC Report, add a sentence or two on the paper David Betson did examining equivalence scales. Add citation, *David M. Betson, "Is Everything Relative? The Role of Equivalence Scales in Poverty Measurement," unpublished paper, March 1996, available from the author at the Department of Economics, University of Notre Dame, South Bend, Indiana.*

Now on p. 21.

Page 36, paragraph 1, replace the dates "1992-1994" with "1987-1994."

If you have any questions, please have a member of your staff call Mr. Michael McKay, Financial and Administration Systems Division, on (301) 457-3115.

Sincerely,



Martha Farnsworth Riche
Director

Comments From the Office of Information and Regulatory Affairs



EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
WASHINGTON, D. C. 20503

ADMINISTRATOR
OFFICE OF
INFORMATION AND
REGULATORY AFFAIRS

MAR 13 1997

Ms. Jane L. Ross
Director, Income Security Issues
Health, Education, and Human Services Division
General Accounting Office
Washington, DC 20548

Dear Ms. Ross:

Thank you for the opportunity to comment on the Draft GAO report, *Poverty Measurement: Issues in Revising and Updating the Official Definition*. Overall, the draft report provides a good overview of the issues and the National Research Council's (NRC) report, *Measuring Poverty: A New Approach*. There are a few issues, however, that could benefit from clarification.

The report is correct that OMB's Office of Information and Regulatory Affairs plans to set up a working group to work with the agencies to review alternative income and poverty measures that could be tested and tracked. However, reviewing the NRC recommendations will be only part of their work. The draft report could be misread as saying that considering the NRC proposals would be their primary charge (p. 5, 19). It would be more accurate to say that "OMB plans to establish a working group that will explore general issues in measuring income and poverty, and consider alternative measures to be developed and tested." The working group would also be broader than just the three agencies mentioned -- HHS and other interested agencies would also be represented.

Second, the report seems to assume that changes to statistical poverty thresholds mean there would be corresponding changes in administrative guidelines for low income program eligibility and benefits. First, we do not anticipate making any changes to statistical thresholds without first obtaining substantial experience with them and general agreement that they are better than existing ones. Second, the administrative poverty guidelines used to administer low income assistance programs are already significantly different from the statistical thresholds. (The administrative guidelines use a different factor to adjust for family size, and different programs use different percentages of the guidelines.) The administrative guidelines would not necessarily be affected by any changes in the statistical series until and unless a separate decision was made that revised measures were more appropriate for those specific programs. Similarly, it is not clear why the NRC assumed that low income programs would use the same definitions of income as the statistical poverty thresholds. (p. 16-17, 28-29).

Third, the report could provide additional discussion of the possible impact of the NRC recommendations on resetting the poverty thresholds. The approach the panel suggested, based on spending between the 30th and 35th percentile of couples with two children, represents a

Now on pp. 3 and 11.

Now on pp. 10 and 16.

Appendix V
Comments From the Office of Information
and Regulatory Affairs

Now on p. 23.

Now on p. 17.

considerably higher level of economic well-being than the current poverty thresholds. The report might also note that broadening the definition of income to include non-cash transfers and the net effect of direct taxes is bound to lower the measured poverty rate unless the thresholds are adjusted to reflect a higher level of economic well-being. (p. 27).

Fourth, the second full sentence on page 29 should be deleted. After the 1969 poverty review, the thresholds were recast back to 1960 using the full CPI and have been updated ever since using the full CPI, rather than the food components. Because the CPI market basket has been updated in the interim, the current ratio of food spending to total spending does not appear relevant to whether the CPI has measured inflation adequately.

Thank you again for the opportunity to comment on your draft report. If you have any questions about these comments, please do not hesitate to contact Paul Bugg of my staff at 202 395-3093.

Sincerely ,



Sally Katzen

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