

Changing the Way the United States Measures Income and Poverty

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by

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I. BACKGROUND -- THE OFFICIAL DEFINITION

The United States Census Bureau has been compiling income estimates annually since 1947. These estimates are from the Current Population Survey (CPS), a nationwide random sample of households, whose primary purpose is to collect labor force information monthly. In March of each year (April prior to 1956), data are collected on the household's income for the previous calendar year.

The official definition of income is not specified in law or regulation. In effect, what is included in income depends on the questions asked. As survey researchers know, the more questions one asks about income by source, the better able respondents are to identify all income.[citation?] Initially, there were only two questions asked of each adult: (1) "How much did ... earn in wages and salaries in 1947?" and (2) "How much income from all sources did ... receive in 1947?". In 1949, self-employment income was asked separately and in 1950 farm and nonfarm self-employment income was asked separately. In 1962, the Census Bureau began systematically assigning values to missing income items (based on reported characteristics using the "hot deck" method). In March 1967, the number of income questions was again expanded, from four to eight categories. These additional items dealt with Social Security, interest, dividends, and rent. In 1968, interest, dividends, rents, and royalties were combined into one question and separate questions were added on public assistance and on unemployment and workers' compensation. In 1975, the number of income questions increased from eight to eleven through addition of a question on the Supplemental Security Income program, a question on Aid to Families with Dependent Children and general assistance, and private and government pension income. A major change took place in 1980 -- the questionnaire was expanded to identify over 50 sources of income and recording of up to 27 different income amounts, including receipt of numerous noncash benefits, such as food stamps (coupons used as cash for qualified food purchases), and housing assistance. Except for minor wording changes, those questions are still in use today. The survey was converted to a computer-assisted interviewing mode in 1994. The data on income thus cover money income received (exclusive of certain money receipts such as capital gains) before payments for items such as personal income taxes, Social Security payroll taxes, and union dues. Money income does not reflect the fact that some families receive part of their income in the form of noncash benefits, such as food stamps, health benefits, rent-free or subsidized housing, and goods produced and consumed on the farm. In addition, money income does not reflect the fact that noncash benefits are also received by some as fringe benefits, e.g. the use of company cars, and full or partial payments by business for retirement programs, medical insurance, and educational expenses.

Moreover, for many different reasons, there is a tendency in household surveys for respondents to underreport their income. From an analysis of independently derived income estimates, it has been determined that income earned from wages or salaries is much better reported than other sources of income and is nearly equal to independent estimates of aggregate earnings (Coder and Scoon-Rogers, 1996). Among the least well-reported sources are interest and dividends.

The current official U.S. definition of income is based on questions which are asked of each person in the CPS sample household 15 years old and over.^{2/} These questions cover the amount of money income received in the preceding calendar year from each of the following sources: Earnings from longest job (or self-employment) and other employment earnings can be classified into three types: (1) Money wage or salary income is the total received for work performed as an employee during the income year. This category includes wages, salary, Armed Forces pay, commissions, tips, piece-rate payments, and cash bonuses earned, before deductions were made for items such as taxes, bonds, pensions, and union dues; (2) Net income from nonfarm self-employment is the net money income (gross receipts minus expenses) from one's own business, professional enterprise, or partnership. Gross receipts include the value of all goods sold and services rendered. Expenses include items such as costs of goods purchased, rent, heat, light, power, depreciation charges, wages and salaries paid, business taxes (not personal income taxes);^{3/} and (3) Net income from farm self-employment is the net money income (gross receipts minus operating expenses) from the operation of a farm by a person on their own account, as an owner, renter, or sharecropper. Gross receipts include the value of all products sold, payments from government farm programs, money received from the rental of farm equipment to others, rent received from farm property if payment is made based on a percent of crops produced and incidental receipts from the sale of items such as wood, sand, and gravel. Operating expenses include items such as the cost of feed, fertilizer, seed, and other farming supplies; cash wages paid to farmhands; depreciation charges; cash rent; interest on farm mortgages; farm building repairs; and farm taxes (not State and Federal personal income taxes). The value of fuel, food, or other farm products used for family living is not included as part of net income.^{4/}

Unemployment compensation includes payments received from government unemployment agencies or private companies during periods of unemployment and any strike benefits received from union funds.

Workers' compensation includes payments received periodically from public or private insurance companies for injuries received at work.

Social Security includes Social Security (old age) pensions and survivors' benefits and permanent disability insurance payments made by the Social Security Administration prior to deductions for medical insurance.

Medicare reimbursements for health services are not included.

Supplemental Security Income includes payments made by Federal, State, and local welfare agencies to low income persons who are 65 years old or over, blind, or disabled.

Public assistance or welfare payments include public assistance payments made to low-income persons, such as Aid to Families With Dependent Children, Temporary Assistance for Needy Families, and general assistance.

Veterans' payments include payments made periodically by the Department of Veterans Affairs to disabled members of the Armed Forces or to survivors of deceased veterans for education and on-the-job training, and means-tested assistance to veterans.

Survivor benefits include payments from survivors' or widows' pensions, estates, trusts, annuities, or any other types of survivor benefits. Payments can be reported from ten different sources: private companies or unions; Federal government (Civil Service); military; state or local governments; railroad retirement; workers' compensation; "Black lung" (miners') payments; estates and trusts; annuities or paid-up insurance policies; and other survivor payments.

Disability benefits include payments received as a result of a health problem or disability other than those from Social Security. Payments can be reported from ten sources: workers' compensation; companies or unions; Federal government (Civil Service); military; state or local governments; railroad retirement; accident or disability insurance; Black lung payments; State temporary sickness; or other disability payments.

Pension or retirement income includes payments reported from eight sources: companies or unions; Federal government (Civil Service); military; state or local governments; railroad retirement; annuities or paid-up insurance policies; withdrawals from special (tax-favored) retirement accounts such as Individual Retirement Account (IRA's); or other retirement income.

Interest income includes payments received (or credited to bank accounts), from bonds, treasury notes, IRA's, certificates of deposit, interest-bearing savings and checking accounts, and all other investments that pay interest.

Dividends include income received from stock holdings and mutual fund shares. Capital gains from the sale of stock holdings are not included as income.

Rents, royalties, and estates and trusts include the net income from the rental of a house, store, or other property, receipts from boarders or lodgers, net royalty income, and periodic payments from estate or trust funds.

Educational assistance includes Pell Grants; other government educational assistance; any scholarships or grants; or financial assistance from employers, friends, or relatives not residing in the student's household.

Child support includes all periodic payments made by parents for the support of children, even if these payments are made through a state or local government office.^{5/}

Alimony includes all periodic payments to ex-spouses. One-time property settlements are not included.

Financial assistance from outside of the household includes periodic payments from nonhousehold members.

Gifts or sporadic assistance is not included.

Other income includes all other regularly received payments that are not included elsewhere on the questionnaire. Some examples are State programs such as foster child payments, military family allotments, and income received from foreign government pensions.

Receipts not counted as income include capital gains received (or losses incurred) from the sale of property, including stocks, bonds, a house, or a car (unless the person was engaged in the business of selling such property, in which case the net proceeds would be counted as income from self-employment); withdrawals of bank deposits; money borrowed; tax refunds; gifts; and lump-sum inheritances or insurance payments.

II. ALTERNATIVE MEASURES OF INCOME

Because money income is but one measure of economic well-being, the Census Bureau also reports on 14 other definitions of income (the series begins in 1979). While not exhaustive, they do illustrate different perspectives on what could be included.

Definition 1.

Money income excluding capital gains before taxes.

This is the official definition described above.

Definition 2.

Definition 1 less government cash transfers. Government cash transfers include nonmeans-tested transfers such as Social Security payments, unemployment compensation, and government educational assistance (e.g., Pell Grants), as well as means-tested transfers such as Aid to Families with Dependent Children (AFDC), Temporary Assistance to Needy Families, and Supplemental Security Income (SSI).

Definition 3.

Definition 2 plus capital gains. Realized capital gains and losses are simulated as part of the Census Bureau's federal individual income tax estimation procedure. While the Census Bureau has access to some income information on individual tax returns that can be matched (with substantial time lag) to survey data, actual capital gains or losses or tax liability are not known.

Definition 4.

Definition 3 plus imputed health insurance supplements to wage or salary income. Employer-paid health insurance coverage is treated as part of total worker compensation; no other benefits paid for or provided by employers are estimated.

Definition 5.

Definition 4 less payroll taxes. Payroll taxes are payments for Social Security old age, survivors, and disability insurance, and for hospital insurance (Medicare).

Definition 6.

Definition 5 less Federal income taxes. The effect of the Earned Income Tax Credit, targeted to low-income workers, is shown separately in Definition 7.

Definition 7.

Definition 6 plus the Earned Income Tax Credit.

Definition 8.

Definition 7 less State income taxes.

Definition 9.

Definition 8 plus nonmeans-tested government cash transfers. Nonmeans-tested government cash transfers include Social Security payments, unemployment compensation, workers' compensation, nonmeans-tested veterans' payments, U.S. railroad retirement, Black lung payments, Pell Grants, and other government educational assistance. (Pell Grants are income-tested but are included here because they are very different from the assistance programs included in the means-tested category.)

Definition 10.

Definition 9 plus the value of Medicare. Medicare is counted at its fungible value./7/

Definition 11.

Definition 10 plus the value of regular-price school lunches.

Definition 12.

Definition 11 plus means-tested government cash transfers. Means-tested government cash transfers include AFDC, SSI, other public assistance programs, and means-tested veterans' payments.

Definition 13.

Definition 12 plus the value of Medicaid. Medicaid is counted at its fungible value.

Definition 14.

Definition 13 plus the value of other means-tested government noncash transfers. Including food stamps, rent subsidies, and free and reduced-price school lunches.

Definition 15.

Definition 14 plus net imputed return on equity in one's own home. This definition includes the estimated annual benefit of converting one's home equity into an annuity, net of property taxes.

Table 12 is a reproduction of a table from U.S. Bureau of the Census (1996a) illustrating the different distributions of income that these definitions imply.^{7/}

These alternative definitions illustrate the dilemma faced by official statisticians when presenting income statistics. Different definitions serve different purposes. Money income has its uses -- it represents command over the resources available to purchase the necessities of life in the open market, including meeting the obligations of citizenship (taxes). Definition 4 probably comes closest to measuring what resources would be available in the absence of government, except that some benefits paid for or provided by employers are not included and others are mandated by the government, some benefits are not provided by employers because they are provided by the government, and work effort is presumably reduced by the existence of a tax on earnings. Definition 8 is closest to after-tax income. Disposable income tries to take account of the effect of taxes and transfers on the household's command of resources -- definition 14 probably comes closest to that approach. Finally, in definition 15 there is an attempt to include the income equivalent value of owning one's own home in that such an asset reduces the need for additional expenditures on shelter.

III. CONSIDERATIONS IN MEASURING POVERTY^{8/}

Formal measurement of poverty in the United States is less than three decades old. Not since the adoption of official poverty thresholds by the Federal government in the late 1960's has there been such a great interest as now in examining and possibly respecifying the thresholds and the income compared with them. The official poverty thresholds in use today by the U.S. Bureau of the Census to measure poverty have their basis in work by Orshansky (1963, 1965). Orshansky started with a set of minimally adequate food budgets calculated for families of various sizes and composition by the U.S. Department of Agriculture for 1961. Based on evidence from the 1955 Household Food Consumption Survey, she determined that expenditures on food represented about one-third of after-tax income for the typical family. This relationship yielded a "multiplier" of three, that is, the minimally adequate food budgets were multiplied by a factor of three to obtain 124 poverty thresholds that differed by family size, number of children, age and sex of head, and farm or nonfarm residence (ad hoc adjustments were made for families of size one and two).

In 1969, the U.S. Bureau of the Budget (now the U.S. Office of Management and Budget -- OMB) adopted the Orshansky measure using pre-tax income as the standard government poverty measure, mandating that thresholds be adjusted for inflation using the Consumer Price Index (CPI) published by the U.S. Bureau of Labor Statistics. With only minor modifications since then (mostly reducing the number of categories, now 48), the Orshansky thresholds still form the basis for the official poverty statistics.^{9/}

When considering the adequacy of the official poverty thresholds, it is critical to realize that one cannot separate the issue of income measurement from poverty definition. When one defines the level of resources needed to be non-poor, one must also determine which resources are to be counted. Therefore, the discussion below covers both income measurement and poverty definition issues; income measurement is discussed first.^{10/}

Whatever poverty thresholds are chosen should be the result of a carefully specified process that cannot be changed arbitrarily from year-to-year, and should be capable of being updated at reasonable intervals as the economic circumstances of the society and the behavior of its demographic and economic components change.

A. DEFINING INCOME FOR MEASURING POVERTY

The key measurement issues are three -- valuing and counting noncash income, subtracting taxes, and reducing survey underreporting and nonsampling errors. Also of interest is whether to continue to publish official estimates based on the CPS or switch to a newer survey designed to collect better income information, the Survey of Income and Program Participation (SIPP).

A.1. Noncash income

The issue of valuing noncash income spans the income distribution. A more comprehensive income measure such as definition 14 above would place a value not only on noncash government transfers, such as food stamps, which typically go to low-income families, but also on elements of nonwage compensation (from employer-paid health insurance to company cars) that typically go to earners at all income levels or only at high levels. The noncash income of U.S. families has grown substantially in the past 25 years. In the 1990's, over half of government transfer spending for the poor is in the form of noncash benefits (U.S. Bureau of the Census, 1996a), whereas the only noncash benefit program that predated the 1960's "War on Poverty" was subsidized (public) housing. This growth of benefits to the poor has been paralleled by a growth of nonwage compensation to wage earners, induced in part by tax laws exempting such compensation from income and payroll taxes, and by growth in health benefits for the elderly. By 1990, employer costs for nonwage compensation had grown to over one-quarter (27.6 percent) of total compensation costs, up from 19.4 percent in 1966.^{11/} Further, nearly

two-thirds of households own homes, which provide them with additional noncash income in the form of housing services.

Of key concern to understanding the well-being of U.S. households is the valuation of medical benefits, both the government health programs--Medicare (medical aid to the elderly and severely disabled) and Medicaid (medical aid to a portion of the poor)--and employer-paid health insurance. The valuation of medical benefits is particularly difficult since coverage of high medical expenses for people who are sick does nothing to improve their poverty status (although the benefits clearly make them better off). Even if one imputes the value of an equivalent insurance policy to program participants, these benefits (high in market value due to large medical costs for the fraction who do get sick), and cannot be used by the recipients to meet other needs of daily living. Accordingly, the Census Bureau developed a not- altogether-satisfactory method, termed fungible value (described in footnote 6), to avoid giving too high a value of these benefits to those toward the low end of the income scale.

A.2. Disposable income

Even though Orshansky's original calculations were based on post-tax income, poverty has always been calculated for the official statistics using pre-tax income because of the limited information collected on the CPS. After-tax income is a better measure of the ability to meet the daily necessities of life than is money income. Also important, in calculating disposable income though, is to address the advisability of deducting work expenses for wage earners such as child care, uniforms, and transportation costs.

A.3. Other issues

Research matching household survey responses to federal income tax returns and comparing them with national income accounts has revealed substantial areas where the level and receipt of certain income sources is underreported (see Coder and Scoon-Rogers, 1996). Attempts to reduce underreporting were made by revising the language used in the CPS questionnaire when the SIPP was launched. This was only partially successful, and response errors remain.

While current procedures of the Census Bureau reweight the data for full interview nonresponse and impute appropriate income responses for individual unanswered questions (item nonresponse), these corrections are insufficient to fully resolve the problem. Procedures to enhance the data through microsimulation or other means are being investigated, along with continued improvement in imputation for nonresponse.

In most societies, "underground," "nonmarket," or "black market" income from legal or illegal activities is typically poorly reported by household respondents to government surveys (or not even collected) and consequently is substantially omitted from official income statistics. This income ranges from barter transactions to home production (e.g., home gardens) to illegal income. Researchers are a long way from measuring this activity accurately, however, so including this income in official statistics would be quite difficult.

It has been suggested that consumption is a better measure of well-being than income (see Cutler and Katz, 1991, and Slesnick, 1993). If a family can maintain its consumption through judicious use of assets when income falls, is it truly poor? Unfortunately, it is difficult to collect accurate annual data on consumption or even expenditures. Further, consumption reflects choices on how to allocate resources, rather than need. Nevertheless, fuller investigation of a consumption-based measure would be useful.

A final issue of income measurement is the choice of surveys to use. As mentioned briefly above, the SIPP questionnaire design, as crafted to reduce income underreporting, does succeed for almost all income sources.^{12/} Yet, when compared with the CPS, it has historically had several drawbacks--a smaller sample size (one-third as large) and necessarily slower data release because of its much greater complexity. These defects are compensated for by the SIPP having greater income detail, both in number of sources and in time segments (by having monthly as opposed to the CPS's annual statistics,) and lower underreporting. The new version of the SIPP, as implemented in 1996, increased the sample size substantially (to 36,700 households) and oversampled low-income households. National estimates from the SIPP will then be comparable to or better than (in terms of sampling error) those from the CPS (reduced to 47,000 households but inefficient for national estimates because it uses a state-based design). One drawback for obtaining a consistent time series of annual national income or poverty estimates from the SIPP, though, will be sample attrition and time-in-sample bias as current plans call for only one SIPP panel to be in the field during any one four-year period. The CPS sample is constantly refreshed by new households.

While the timeliness issue may never be resolved fully in SIPP's favor, the SIPP can provide a preliminary estimate on much the same schedule as the CPS. Still, it is desirable to view the surveys complementarily. If modeling using administrative records can correct underreporting errors in both surveys, they would then give the same aggregate statistics. The CPS could be used for a quick snapshot, consistent with data collected since 1947 (the SIPP began in 1983), while the SIPP would be used for more detailed estimates, for subannual and multiyear estimates, and for understanding other dimensions of poverty (assets, disability, gross flows, and other dynamic aspects).^{13/}

B. SETTING THRESHOLDS TO DEFINE POVERTY

With an absolute measure of poverty, there are key decisions to be made about determining the appropriate level for poverty thresholds. The key research issues addressed here are minimal consumption levels for specific commodities, ways of correcting for differences in family size and composition, and ways of correcting for cost-of-living differences across time and among areas.

B.1. Minimal consumption standards

Minimal consumption standards for all necessary commodities could in theory be established, perhaps by an expert panel, but doing so would raise difficult ethical issues about which commodities to include (e.g., is a telephone a necessity?). One alternative is to define minimal consumption standards for a limited number of necessities (e.g. food, clothing, shelter) and obtain a poverty threshold by using a multiplier to account for necessities not measured.^{14/}

B.2. Equivalence scales

The relationship embodied in the current U.S. poverty thresholds among families of different sizes (termed the equivalence scale) is supposed to represent the different relative costs of supporting those families at a minimally adequate levels. In fact, the relationship is based solely on the relative food costs as they existed in 1961 and include some unfortunate anomalies (see Ruggles, 1990, pp. 64-68). While it is possible to develop minimal budgets for every type and size of family separately and thus eliminate the need for equivalence scales entirely, in practice it is difficult to do so. No one scale now exists that is generally accepted. Issues in developing equivalence scales include which distinctions in family circumstances (e.g. owner/renter) should lead to different thresholds, how resources are shared within the family or household, and whether a more useful basis for determining poverty is the household (those living in one housing unit) rather than the family (those in one household related by blood or marriage). See Betson (1996) for a further discussion of these issues.

B.3. Cost-of-living differences

In as large and diverse a country as the U.S., there are significant differences in the cost-of-living among localities. Unfortunately, there are no currently available data upon which to estimate interarea price differences reliably. (See Kokoski et al., 1992, and Moulton, 1992, for some work in this area.)

A related price issue is how to adjust for inflation. The U.S. poverty thresholds now use the CPI to adjust thresholds over time. If the measurement of minimal consumption is used as the basis for new thresholds, presumably this should be the basis every year, with components, prices, and multipliers reestimated as often. Clearly this is not practical. A reasonable compromise might be to respecify and reestimate the minimal consumption bundle at prespecified intervals as market baskets become outdated, say every ten years, and use the CPI for interim adjustments. The market basket used for the CPI itself is typically reviewed and respecified once every ten years or so.^{15/}

C. THE COMMITTEE ON NATIONAL STATISTICS REPORT

The National Academy of Sciences Committee on National Statistics (CNStat) released a report in May 1995 entitled *Measuring Poverty: A New Approach* (Citro and Michael, 1995). In that report, the committee recommended that the federal government redefine the way it measures poverty. OMB has requested that experts from the Census Bureau and other agencies examine technical methods for doing so.

The key changes they recommend are threefold: change the income measure, change the poverty thresholds, and change the survey used. To change the income measure from the current money income definition, they propose to add noncash benefits, subtract taxes, subtract work expenses, subtract child care expenses, subtract child support paid, and subtract medical out-of-pocket expenses (MOOP). The poverty thresholds are to be based on food, clothing, shelter, and "a little bit more" (75-83% of median expenditures on these items multiplied by 1.15-1.25), a new equivalence scale, an allowance for geographic variation, and updated annually based on growth in median expenditures. Finally, the panel recommended that the government use the SIPP instead of the March CPS to collect the basic income and poverty-related data.

Among the technical issues to be resolved before implementing such a new measure are the following:

1. Reestimating the valuation methodologies for government noncash transfer programs including school lunches, food stamps, and housing benefits; developing new estimation methodologies for additional programs and possibly developing a new methodology for valuing Medicare and Medicaid (depending on whether the subtraction of MOOP is adopted or not);
2. Completing development of a tax simulation model for SIPP;
3. Developing a methodology for estimating MOOP (e.g. a statistical match of the National Medical Expenditures Survey to SIPP) or reestimation of employer contributions to health insurance using more recent data;
4. Estimating and imputing work and child care expenses;

5. Redesigning the SIPP sampling scheme to maximize reliability of a time series of cross-section estimates while maintaining some longitudinal estimation capabilities, taking account of the need for State-level estimates, and minimizing the attrition bias;
6. Reviewing the Consumer Expenditure Survey to improve its effectiveness for its new dual role (defining the market basket for the Consumer Price Index and the poverty thresholds) and possibly preparing for consumption-based rather than income-based poverty estimates in the future;
7. Creating a time series of poverty estimates from the SIPP and developing methods to impute additional variables to the CPS to develop comparable time-series data for that survey;
8. Doing substantial further work on income underreporting and imputation models;
9. Adding child support and alimony paid questions to CPS; and
10. Developing and adding "medical care risk" and possibly medical expenditures questions to SIPP to supplement the poverty measure if medical care costs and benefits are excluded from the measure.

Even if these technical issues can be resolved expeditiously, there are still policy issues that must be debated and resolved before a new measure is adopted. These include:

1. Including or excluding medical costs and benefits. On the one hand, the CNStat recommended excluding MOOP, employer contributions to health insurance, and benefits from medical transfer programs from income. On the other hand, adopting as official the current (experimental) practice of including them would require improving the current method for valuing medical transfer program benefits, measuring medical needs more accurately, and updating the methodology for imputing employer contributions to health insurance.
2. Basing thresholds on a pre-specified fraction of median expenditures. How might the public and Congress react to a new poverty threshold that showed millions more poor persons than the current measure? Are we confident enough about the quality of (i.e. lack of biases in) the Consumer Expenditure Survey data to use it as the arbiter of the poverty level? It may be that the likely acceptance of any new definition would be enhanced if the new index were "chained" to the old by matching the overall poverty rate obtained (but allowing the distribution to vary).
3. Developing geographical cost-of-living variations. It is clear that the cost-of-living differs substantially from place to place, and different choices of methodology to reflect this fact would have different implications. If geographic variation is to be incorporated, some method for periodically updating the thresholds for relative price changes among areas would also need to be established.
4. Annual inflation updating. The panel proposed using the rate of growth in expenditures to index the thresholds. This is an attempt to introduce some deliberate "relativity" into the measure and would have quite different ramifications from using the Consumer Price Index.
5. Choosing the equivalence scale. Choice of the scale would inevitably alter the distribution of the poor.
6. Underreporting. If the technical issues about how to do so are resolved, should the income statistics from the survey be adjusted for underreporting based on administrative data and modeling?
7. Review and Revision. Should any new definition include a regular cycle of review and revision based on pre-specified criteria (CNStat recommended once a decade)?

Open debate of these issues seems the most likely way to resolve them, potentially leading to a new way of measuring poverty that OMB would approve and that other policy makers would accept as an improved methodology for measuring poverty in the United States.

APPENDIX -- FAMILIES, HOUSEHOLDS, AND UNRELATED INDIVIDUALS

It should be noted that although the income statistics refer to receipts during the preceding calendar year, the demographic characteristics, such as age, labor force status, and family or household composition are as of the survey date. The income of the family or household as measured by the CPS does not include amounts received by persons who were members during all or part of the income year if these persons no longer resided in the family or household at the time of interview. However, income data are collected for persons who are current residents but did not reside in the household during the income year. The term "family" refers to a group of two or more persons related by birth, marriage, or adoption who reside together; all such persons are considered as members of one family. For example, if the son of the person who maintains the household and the son's wife are members of the household, they are treated as members of the parent's family. Every family must include a reference person. Two or more people living in the same household who are related to one another, but are not related to the householder, form an "unrelated subfamily." Households consist of all persons who occupy a housing unit. A house, an apartment or other group of rooms, or a single room is regarded as a housing unit when it is occupied or intended for occupancy as separate living quarters: the occupants do not live and eat with any other persons in the structure and there is direct access from the outside or through a common hall. A

householder is the person in whose name the unit is rented or owned. A household includes the related family members and all the unrelated persons, if any, such as lodgers, foster children, wards, or employees who share the housing unit. A person living alone in a housing unit or a group of unrelated persons sharing a housing unit as partners is also counted as a household. The count of households excludes group quarters. The term "unrelated individuals" refers to persons 15 years and over (other than inmates of institutions) who are not living with any relatives. An unrelated individual may either: constitute a one-person household; be part of a household including one or more other families or unrelated individuals; or reside in group quarters, such as a rooming house. Thus, a widow living by herself or with one or more other persons not related to her, a lodger not related to the householder or to anyone else in the household, and a servant living in an employer's household with no relatives are examples of unrelated individuals.

NOTES

1. The history of income questions asked on the Current Population Survey is from Welniak (1990).
2. This section drawn from Appendix A of U.S. Bureau of the Census, 1996a.
3. In general, inventory changes are considered in determining net income from nonfarm self-employment; replies based on income tax returns or other official records do reflect inventory changes. However, when values of inventory changes are not reported, net income figures exclusive of inventory changes are accepted. The value of saleable merchandise consumed by the proprietors of retail stores is not included as part of net income.
4. In determining farm self-employment incomes, inventory changes are usually considered in determining net income only when they were accounted for in replies based on income tax returns or other official records which reflect inventory changes; otherwise, inventory changes are not taken into account.
5. Child support paid and other inter-household transfers should theoretically be subtracted from income to avoid double counting, but the data necessary to do so are not collected.
6. The fungible approach for valuing medical coverage assigns income to the extent that having the insurance would free up resources that would have been spent on medical care. The estimated fungible value depends on family income, the cost of food and housing needs, and the market value of the medical benefits. If family income is not sufficient to cover the family's basic food and housing requirements, the fungible value methodology treats Medicare and Medicaid as having no income value. If family income exceeds the cost of food and housing requirements, the fungible value of Medicare and Medicaid is equal to the amount which exceeds the value assigned for food and housing requirements (up to the amount of the market value of an equivalent insurance policy -- the total cost divided by the number of participants in each risk class).
7. This table also includes three additional variants (denoted 1a, 1b, 14a).
8. This section is drawn from Weinberg, forthcoming.
9. See Fisher (1992) for more historical detail on the development of the poverty thresholds.
10. Also critical to the definition of poverty is whether to use an absolute or relative measure. A relative measure sets the poverty standard at a fixed fraction, say 50 percent, of some measure of the population's well-being such as median family income. Thus, under a relative poverty measure, only if the incomes for the families at the bottom of the income distribution improve relative to the rest of the distribution would poverty decline. The alternate method of measuring poverty and the one currently in use in the U.S., at least in theory, is more or less an absolute measure. When constructing an absolute measure, one attempts to measure the minimal consumption levels of as many goods as possible. The cost of that consumption bundle is then increased to account for necessary goods not included by use of a "multiplier." Orshansky measured only the cost of a minimally adequate diet. Other proposals have suggested adding shelter, clothing, and medical care to the list. I restrict the discussion here to absolute measures; most observers expect the U.S. poverty concept to retain this feature.
11. Data are from the Compensation and Working Conditions Branch, Bureau of Labor Statistics. The 1966 percentage is not strictly comparable to the 1990 figure.
12. Exceptions are wages and salaries (due to a failure to always collect gross instead of net earnings) and workers' compensation (payments for injuries on the job.) There are early indications that changes to the questionnaire in 1996 have ameliorated these problems.
13. The Committee on National Statistics panel on the future of the SIPP recommended moving toward the use of the SIPP for official income and poverty measurement (Citro and Kalton, 1993).
14. A full review of budget-based approaches is in Watts (1993).
15. There is also an issue about whether to use the official CPI or an experimental CPI created to correct for inaccurate measurement of housing costs in the official CPI prior to 1983. The next CPI market basket revision is scheduled for 1998.

REFERENCES

Betson, David M. 1996. "Is Everything Relative?' The Role of Equivalence Scales in Poverty Measurement." University of Notre Dame. March.

Citro, Constance F. and Graham Kalton (eds.). 1993. The Future of the Survey of Income and Program Participation. Washington, DC: National Academy Press.

Citro, Constance F. And Robert T. Michael (eds.). 1995. Measuring Poverty: A New Approach. Washington, DC: National Academy Press.

Coder, John and Lydia Scoon-Rogers, 1996, "Evaluating the Quality of Income Data Collected in the Annual Supplement to the March Current Population Survey and the Survey of Income and Program Participation," Working Paper, U.S. Bureau of the Census, July.

Cutler, David M. and Lawrence F. Katz. 1991. "Macroeconomic Performance and the Disadvantaged." Brookings Papers on Economic Activity No. 2, pp. 1-74.

Fisher, Gordon M. 1992. "The Development and History of the Poverty Thresholds." Social Security Bulletin vol. 55 No. 4 (Winter), pp. 3-14.

Kokoski, Mary, Patrick Cardiff, and Brent Moulton. 1992. "Interarea Price Indices for Consumer Goods and Services: An Hedonic Approach Using CPI Data." U.S. Bureau of Labor Statistics, January.

Moulton, Brent R. 1992. "Interarea Indexes of the Cost of Shelter Using Hedonic Quality Adjustment Techniques." U.S. Bureau of Labor Statistics, October.

Orshansky, Mollie. 1963. "Children of the Poor." Social Security Bulletin v. 26 (July), pp. 3-13.

Orshansky, Mollie. 1965. "Counting the Poor." Social Security Bulletin v. 28 (January), pp. 3-29.

Ruggles, Patricia. 1990. Drawing the Line. Washington, D.C.: Urban Institute Press.

Slesnick, Daniel T. 1992. "Gaining Ground: Poverty in the Postwar United States." Journal of Political Economy Vol. 101 No. 1 (February), pp. 1-38.

U.S. Bureau of the Census, Money Income in the United States: 1995, Current Population Reports P60-193, Washington, DC: US Government Printing Office, September 1996[a].

U.S. Bureau of the Census, Poverty in the United States: 1995, Current Population Reports P60-194, Washington, DC: US Government Printing Office, September 1996[b].

Watts, Harold W. 1993. "A Review of Alternative Budget-Based Expenditure Norms." Paper prepared for the Panel on Poverty Measurement and Family Assistance of the Committee on National Statistics, revised (May).

Welniak, Edward J., Jr. 1990. "Effects of the March Current Population Survey's New Processing System on Estimates of Income and Poverty," paper prepared for American Statistical Association annual meeting, August.

Weinberg, Daniel H. Forthcoming. "Measuring Poverty: Issues and Approaches", in *Inner City Poverty* (edited by C. Michael Henry, Yale University Press).