

# UNIVERSITY OF MARYLAND



## MEMORANDUM

July 19, 2005

To: Seminar Members, "Reconsidering the Federal Poverty Measure"

From: Douglas Besharov and Gordon Green

Subject: Summary of Session #7: Alternative Measures of Income Poverty and the Anti-Poverty Effects of Taxes and Transfers

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The seventh seminar on "Reconsidering the Federal Poverty Measure" was held at the American Enterprise Institute on May 10, 2005. Douglas Besharov opened the seminar by providing an overview of the topics of the evening's discussion, including a description of the various income definitions and options for measuring poverty, the adjustments for unreported income, and the next steps in the work of the poverty measure seminar. Daniel Weinberg, Chief Economist at the U.S. Census Bureau, presented the results of special tabulations prepared by the Census Bureau and John Coder of Sentier Research, showing the effects of alternative approaches to measuring poverty on the number and composition of the poor. His presentation, "Alternative Measures of Income Poverty and the Anti-poverty Effects of Taxes and Transfers," was divided into three parts:

- (1) The effect of pre-tax/pre-means-tested transfer income on poverty estimates;
- (2) The effect of post-tax/post-means-tested transfer income on poverty estimates; and
- (3) The effect of adjusting for unreported transfer income on poverty estimates; based on the Urban Institute's TRIM model.

Following each part of Weinberg's presentation, comments were provided by three discussants: Rebecca Blank, Dean, Gerald R. Ford School of Public Policy and co-director, National Poverty Center, University of Michigan; Robert Rector, Senior Research Fellow, Domestic Policy Studies, The Heritage Foundation; and Robert Reischauer, President, the Urban Institute.

## **Douglas Besharov's Presentation**

Besharov noted that the evening's seminar would be an important milestone, showing the empirical effect of various alternative approaches to measuring poverty that had been discussed in previous poverty seminars. He noted that no specific approach for refining the poverty measure was identified, because numerous additional analyses need to be conducted before any specific approach is adopted. He said that many different proposals for measuring poverty had been discussed, and seminar participants had expressed concern about the effect of the adjustments on the percent of people below the poverty line and distributional issues created by the adoption of any new approach for measuring poverty. Thus, this seminar was intended to address these concerns.

Besharov divided his presentation into three parts:

- (1) Correcting the current poverty measure,
- (2) Recognizing the impact of means-tested benefits on poverty estimates, and
- (3) Adjusting for unreported income and measuring the effect on poverty estimates.

He said that the quality of data used to produce the poverty estimates is a key issue that needs to be resolved in order for work to go forward. He also discussed the next steps for the poverty measure seminar, including the need to compare estimates presented here with other measures of economic well-being and to engage a broader audience to consider these issues.

Concerning the correction of the current poverty measure, Besharov noted that the Census Bureau was asked to produce a pre-tax/pre-means-tested transfer income measure (that includes Social Security) to provide a rough approximation of income generated by the market. Compared to the current measure of income used to determine poverty status, the new measure excludes two means-tested cash transfers: Temporary Assistance to Needy Families (TANF) and Supplemental Security Income (SSI). Four major options for the pre-tax/pre-means-tested income measure are considered:

- (1) The use of household income (including cohabitators) rather than family income to determine poverty status;
- (2) The use of a three-parameter equivalence scale rather than the current scale to adjust for differences in family size in the matrix of poverty thresholds;
- (3) The use of the CPI-U-RS inflation adjustor (and later, also the CPI-U-X1) rather than the CPI-U to adjust the poverty thresholds for inflation; and
- (4) The inclusion of an estimate of the return to home equity in income, based on a government bond interest rate.

Besharov said that Weinberg would discuss the distributional and policy implications of these adjustments, including their effect on state-to-state changes in poverty and the percent of children and seniors below the poverty line.

The post-tax/post-means-tested transfer income measure shows the impact of means-tested benefits on the number and composition of the poor and provides a useful “anti-poverty index.” Besharov said that this measure is similar to the ones provided by Christopher Jencks and Wendell Primus at earlier poverty measure seminars. Means-tested benefits in the Census Bureau’s post-tax/post-means-tested transfer income measure included: Earned Income Tax Credit (EITC); TANF; SSI; food stamps; school meals; housing assistance; and energy assistance. Means-tested medical benefits such as Medicaid, and more broadly Medicare (which is not means-tested), as well as child care subsidies, were not included in the post-tax/post-means-tested transfer income measure. Besharov noted that to arrive at this income measure, federal and state income taxes were subtracted, as well as Social Security payroll taxes.

To estimate the effect of adjusting for unreported income in the special tabulations, the Census Bureau contracted with John Coder (a former Census Bureau employee) of Sentier Research to prepare the estimates. The adjustment procedure used methods available from the Urban Institute’s TRIM model to adjust for underreporting in three specific types of transfer payments: TANF, SSI, and food stamps. Other major forms of income not adjusted for unreported income included: wages and salaries, self-employment income, Social Security, property income (such as interest and dividends), illegal income, and gifts, because procedures for making the adjustments are not currently in place. Future efforts should focus on developing procedures to adjust for unreported income across the income distribution.

### **Daniel Weinberg’s Presentation: Part I**

The first part of Weinberg’s presentation dealt with the background of the special tabulations prepared by the Census Bureau and the creation of a pre-tax, pre-means-tested transfer income measure of poverty. Weinberg noted that Besharov and Gordon Green worked with the seminar planning group to develop alternative measures of income poverty and methods to gauge the impact of taxes and transfers. They asked the Census Bureau about which measures were feasible to compute with existing resources before the next (tonight’s) seminar. Staff at the Census Bureau developed tabulations showing the effect of using alternative definitions of income and the various adjustment options on poverty, except for household income and unreported income. Weinberg noted that Charles Nelson and Joseph Dalaker at the Census Bureau had the lead responsibility for carrying out this part of the project. The Census Bureau contracted with John Coder (a former Census Bureau employee) of Sentier Research to develop the tabulations showing the effects of using household income and adjusting for unreported income. Weinberg thanked these and other individuals at the Census Bureau for their efforts in

making the project a success.<sup>1</sup>

Weinberg said that five decisions must be made before the construction of any income-based poverty measure. The decisions concern the choice of a concept to measure income, the unit of analysis (such as family or household structure) that is used to determine poverty status, an equivalence scale that is used to adjust for differences in family size, an inflation factor to adjust the thresholds over time, and the sources that are used to generate the data.

Concerning the choice of an income concept, Weinberg noted that five different income variants were used for the tabulations: (1) money income (used in the official poverty measure), (2) pre-tax, pre-transfer (money income excluding means-tested cash transfers), (3) pre-tax, pre-transfer plus an imputed return to home equity, (4) post-tax, post-transfer (money income plus net realized capital gains, plus cash and noncash non-medical transfers, plus the EITC, minus income and payroll taxes); and (5) post-tax, post-transfer plus the return to home equity minus property taxes.

Weinberg noted several additional aspects of the income measures that he planned to present. First, non-means-tested transfers such as Social Security were included in all of the income measures. Second, work expenses were not subtracted from income, nor were out-of-pocket medical costs. Weinberg noted that the adjustments for unreported income prepared by Coder would be discussed at the end of his presentation.

There were two units of analysis in the tabulations presented by Weinberg. The first is families, which consists of two or more persons related by blood, marriage, or adoption, and the incomes of all of the people living in the family unit. The second is households, which includes all of the people living in a housing unit, whether they are related or not, and the corresponding incomes of all of the household members. As with the official estimates of poverty produced by the Census Bureau, unrelated children under fifteen years old were excluded from Weinberg's special tabulations.

Weinberg noted that two different equivalence scales were used in his tabulations to reflect differences in need for families and households of different sizes. One set of tables was based on the equivalence scale used in generating the official poverty threshold matrix, originally developed by Mollie Orshansky of the Social Security Administration. Another set of tables was based on an experimental three-parameter equivalence scale developed by David Betson at Notre Dame University. The factors used to develop the thresholds in Betson's three-parameter scale are as follows: one adult: 1.00; two adults: 1.41; single parents:  $[1.8+0.5*(children-1)]^{0.7}$ ; other families:  $[adults+0.5*children]^{0.7}$ .

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<sup>1</sup>Following the seminar, Weinberg prepared a paper summarizing his presentation, titled "Alternative Measures of Income Poverty and the Anti-poverty Effects of Taxes and Transfers," available at <http://www.ces.census.gov/ces.php/abstract?paper=101716>.

The official poverty thresholds are adjusted for inflation using the CPI-U for all years, but there is another way to adjust the poverty thresholds for inflation. Weinberg referred to the first one as the published CPI-U, which is made up of the following components for different time periods: 1963–1982 CPI-U, 1983–1999 CPI-U-X1, and 2000–2002 CPI-U-RS. He referred to the other series as the CPI-U-RS: 1963–1977 CPI-U and 1978–2002 CPI-U-RS. The estimates in Weinberg’s special tabulations labeled CPI-U-RS use this series from 1978–2002. It would have been possible to use the CPI-U-X1 for the period from 1967–1978, but this was not done in the present analysis (although it may be done at a future date).

The data set used in the special tabulations on poverty is the 2003 Current Population Survey Annual Social and Economic Supplement (CPS ASEC), which reports on poverty in 2002. This survey was selected in order to facilitate adjustments for unreported income, because it is the most recent data available from the TRIM model.

Weinberg noted two measurement issues about the data in the special tabulations on poverty. First, the Census Bureau was unable to partition all income sources into means-tested and non-means-tested components. Second, improved methods for valuing noncash benefits such as housing have not yet been implemented at the Census Bureau. Besharov asked if the improved methods for valuing housing benefits would be higher or lower than the current ones, and Weinberg replied that the assigned values would likely be higher.

Weinberg also issued several warnings associated with the special tabulations on poverty. He described this effort as a “work in progress.” No significance tests were performed on the results. Because all of the estimates are from the same data set, conventional measures of sampling variability do not apply. Weinberg said that, in general, for a difference in the year-to-year overall poverty rate to be statistically significant, it must be at least 0.3 percentage points. Finally, he noted that the Office of Management and Budget (OMB) is responsible for any changes to the official measure of poverty.

Use of the three-parameter equivalence scale and the CPI-U-RS lowers the poverty thresholds for most types of families. Weinberg noted that the poverty threshold for a two-adult, two-child family is the same for the official threshold (\$18,244) as the three-parameter threshold (\$18,244) for the same type of family, by design. However, the poverty threshold for a single adult under sixty-five years old is lower under the three-parameter scale (\$8,455) than under the official scale (\$9,359). Similarly, for a three-adult, three-child family, the poverty threshold is lower under the three-parameter scale (\$24,232) than under the official scale (\$24,797). The largest reductions in the poverty thresholds come from using the CPI-U-RS to adjust for inflation. Under this measure, the poverty thresholds are significantly lower for all three types of families used as an illustration: single adults under sixty-five years old (\$7,460), two adult, two-child (\$16,095), and three-adult, three child (\$21,378).

Using different variants of the pre-tax, pre-means-tested transfer income concept has a significant effect on the number of people counted as poor. Under the official definition of income used to measure poverty, based on family income and the CPI-U, the poverty rate in

2002 was 12.1 percent. Under the measure of pre-tax, pre-means-tested transfer income, the poverty rate rises to 12.8 percent. When the return to home equity is added to this measure, the poverty rate declines to 11.6 percent.

As would be expected from the adjusted poverty thresholds presented earlier, using the CPI-U-RS has a much larger effect on the poverty rate than using the three-parameter equivalence scale. Using the three-parameter equivalence scale, the poverty rate is only marginally lower for families (declining from 12.1 to 12.0 percent) and marginally higher for households (rising from 10.5 to 10.6 percent). Using the CPI-U-RS to adjust the poverty thresholds for inflation causes the poverty rate to decline by about 2 percentage points for both families (from 12.0 to 10.0 percent) and households (from 10.6 to 8.6 percent). Using household income instead of family income reduces the poverty rate by about 1.5 percentage points under the official measure (from 12.1 to 10.5 percent), under the three-parameter equivalence scale (from 12.0 to 10.6 percent), and under the CPI-U-RS (from 10.0 to 8.6 percent).

Based on a question from Besharov, Weinberg explained the household income concept. There are households in which some people are not related, referred to as unrelated individuals. When people are not related, their poverty status is determined on a person-by-person basis, based on their own income. Under the household income concept, all of the unrelated individuals in these households are treated as if they are sharing resources. For households in which all of the members are part of a family, there is no difference in household and family income; the presence of unrelated individuals is what causes the difference. Weinberg gave an example of two unrelated college students living together, one rich and one poor, and illustrated how their incomes would be combined to arrive at household income. Besharov asked if cohabitators were the main category in these types of households, and Blank replied that she thought college students were the major category.

Weinberg presented a larger matrix for pre-tax, pre-means-tested transfer income, showing the separate effects of using household income, the three-parameter equivalence scale, and the CPI-U-RS on measured poverty rates. This matrix made it very clear that, of the adjustments considered, the major impact in lowering poverty rates comes first from using the CPI-U-RS instead of the CPI-U, second from using household income instead of family income, and third (and only minimally) from using the three-parameter equivalence scale instead of the official equivalence scale.

Based on an example of people living in California, Weinberg illustrated how the distributional effect of using different options to estimate poverty can be summarized with a statistic that he called the “poverty shares change index.” Basically, this index is derived by dividing the poverty share for a group under an alternative measure of poverty by the poverty share for the group under the official measure of poverty. For persons in California households, using pre-tax, pre-transfer income, including an imputed return to home equity, the three-parameter equivalence scale, and the CPI-U-RS, the poverty share is 13.54 percent, compared to an official poverty share of 13.32 percent. The poverty shares change index is calculated as  $13.54/13.32 = 101.6$ . The interpretation of this statistic is that under the alternative approach for

measuring poverty, as opposed to the official approach, the share of people under the poverty line in California is 1.6 percent larger. Weinberg noted that detailed statistics on the poverty shares change index can be found in his supplemental tables (which are available at the poverty measure website).

Weinberg presented two charts showing the pre-transfer poverty shares for the four largest states (based on population). When the return to home equity is not included in income, California and New York have an increased share of poverty, Texas has a reduced share, and Florida's share is either higher or lower under the different measures used. Charles Murray asked how use of the pre-tax, pre-transfer measure changes the poverty shares. Weinberg replied that states do not get the same share of cash transfers, which are excluded under the pre-tax, pre-transfer measure, so this changes their share of poverty. When the return to home equity is included in the estimates, Florida has a lower poverty share than the other states considered. This occurs because there is a large proportion of older persons living in Florida with large amounts of equity in their homes, so when the return on equity is calculated and added to income, the poverty share for Florida declines significantly.

Weinberg then highlighted, by state, the largest changes in the poverty share index under the alternative approaches for measuring poverty compared to the official poverty measure. Using family income, the three-parameter equivalence scale, and the CPI-U-RS, the poverty share increased by 10 percent or more in three states (Hawaii had the largest increase at 15.4 percent), and decreased by 10 percent or more in two states (Idaho had the largest decrease at -11.4 percent). Using household income, the three-parameter equivalence scale, and the CPI-U-RS, the poverty share increased by 10 percent or more in seven states (West Virginia had the largest increase at 18.8 percent) and decreased by 10 percent or more in seven states (Minnesota had the largest decrease at -24.3 percent). Michael O'Grady asked if the interpretation of these changes was the same in terms of who gets the largest cash transfers, and Weinberg replied that it was. Reischauer observed that changes in the poverty share also indicate something about the clustering of people around the poverty line. If people are more tightly clustered around the poverty line in New York than in South Carolina, then slight changes can result in larger shifts in the poverty share in New York than in South Carolina.

Weinberg compared changes in poverty shares for children under eighteen years old and seniors sixty-five years old and over under the alternative approaches to measuring poverty. Children have a higher share of poverty under the pre-transfer measure, whether or not the return to home equity is included, because they receive a larger share of the cash transfers than other groups. Seniors have a higher share of poverty under the pre-transfer measure without the return to home equity, but a smaller share when the return to home equity is included because many have a large amount of equity in their homes. Besharov noted that Social Security is treated as a non-means-tested transfer in the tabulations, and Reischauer added that while Social Security is not means-tested, it is a transfer.

## **Robert Rector's Part I Comments**

Rector said that, overall, the presentation on alternative approaches to measuring poverty and the supporting supplemental tables were put together very well and move closer to a more accurate estimate of the actual incidence of poverty in the U.S. He endorsed using household income rather than family income to determine poverty status, because it gives a more accurate description of resources actually available to people. Rector also endorsed the use of the CPI-U-RS instead of the CPI-U to adjust the poverty thresholds, arguing that past efforts to measure inflation were flawed and did not accurately reflect actual increases in prices. He also endorsed the inclusion of means-tested transfers in income to determine poverty status, but argued that the approach used was inadequate in that it did not go far enough in counting all of the benefits provided by the government. In summary, he thought that the adjustments made were an improvement in measuring poverty more accurately.

Concerning distributional issues associated with the different approaches used to measure poverty, Rector questioned why the state-to-state distributions were presented. He said that any changes that the seminar group proposes to refine the estimation of poverty will not be incorporated into the formulas used to distribute funds to states, and these formulas are often irrational to begin with.

Rector also discussed the importance of accounting for assets in the determination of poverty status. He said that a problem with the approaches used is that they do not count assets, but the inclusion of an imputed return to home equity was a step in the right direction. Rector questioned how imputed rent, which measures a flow of services, compares with the imputed return to home equity. Thesia Garner clarified that the Census Bureau's approach, which applies an interest rate on government bonds to the equity in a home, generates a flow of income over the time period considered. Rector remarked that including the return to home equity was important because it shows that seniors are less economically distressed than conveyed by the official poverty statistics.

## **Robert Reischauer's Part I Comments**

Reischauer endorsed the use of the three-parameter equivalence scale, the inclusion of a return to home equity in income, and said that the income of cohabitators could be counted in household income if they can be identified. He took issue with the characterization of the work as "corrections" to the poverty measure, which implies that mistakes have been made in the past, and suggested that the work be described as "improvements" to the poverty measure. Reischauer said that the exercise seems to be looking for ways to reduce the poverty thresholds or increase the measurement of resources going to the bottom third of the income distribution. He said that, instead, we should be looking for ways to move forward by seeking modifications that apply to the entire income distribution, which is relevant for showing how society views the incidence of poverty. Reischauer said that efforts should be made to disrupt current patterns of measurement as little as possible, and, therefore, changes should be made prospectively. Reischauer warned the seminar group to be careful about imputations used in deriving alternative measures of



poverty, because they often are rough approximations and create new problems.

Reischauer said that he was more comfortable about some of the adjustments made than others. For example, he supported the use of the three-parameter equivalence scale because it makes the thresholds more defensible and does not have a large distributional effect. Noting that everyone wants a better method to measure inflation, Reischauer said that he would make the adjustment in the reverse manner from that employed in the tabulations. He would adjust the current poverty thresholds to keep the number of poor at the same level as in the base year and then adjust previous thresholds using the CPI-U-RS, which would show more poor people in the past. Reischauer noted that the amount of social support provided in the past would have been different if the thresholds were different, so it is arbitrary to make the adjustment for inflation in the manner proposed. He also agreed with counting a return to equity in a home as part of income, but, as with inflation, he would backcast the estimate.

Concerning the unit of analysis and income concept used to determine poverty status, Reischauer said that he was opposed to using household income rather than family income. He noted that in households with unrelated individuals, which include college students and many other combinations, some of the people share resources and some do not. For example, the individuals may share paying the rent, but not share other resources. Reischauer noted that when statistics are issued on the characteristics of people without health insurance, about 17 percent of the uninsured live in households with \$75,000 or more in annual income. This might reflect a situation in which several unrelated individuals live together, share some things but not others, and some may not have health insurance coverage.

There was an extensive discussion about how to treat cohabitators when determining poverty status. Reischauer said that cohabitators who are romantically involved might be thought of as a quasi-family, but we do not know how many of these cohabitators there are and how extensively they share their resources. Besharov asked whether Reischauer would be comfortable counting the income of all cohabitators in a household. Reischauer said that if we can identify the cohabitators, he does not have a problem with this approach, but there is still a difference because unlike cohabitators, families have a legal obligation to provide support. Weinberg added that the CPS ASEC cannot be used to determine the extent of cohabitation because all of the questions needed to make an accurate determination are not asked. For example, how does the presence of a child relate to the determination of cohabitation, and are there situations that should not be included, such as brothers and sisters with different last names who live together? Richard Bavier noted that an examination of CPS ASEC data on persons of opposite sex sharing living quarters reveals that most households with unrelated individuals are cohabitators. Reischauer responded that persons of similar age living together are not always romantically engaged.

### **Rebecca Blank's Part I Comments**

While Blank was supportive of the need to make refinements to the poverty measure, she was critical of some of the specific adjustments presented by Weinberg. Blank began her

comments by saying that she wanted to “talk outside the box” because the adjustments to the poverty measures missed half of the issue: namely, the poverty thresholds themselves. She said that the poverty thresholds need to be defined in a manner that is consistent with the definition of income used, because the meaning of poverty is in the thresholds. Blank said that there are three possible arguments against making the changes that have been proposed:

- (1) The changes create an inconsistency in the time series;
- (2) The changes are too difficult to make (she said that this is not a good reason because there are other things that are even harder to do); and
- (3) Some of the proposed changes to how income is measured are inconsistent with the current poverty thresholds, such as the use of household rather than family income, adjusting for unreported income, and recognizing changes in family structure that involve the sharing of income.

Blank felt that the concerns expressed in item (3) above were the most significant.

There was discussion about the points raised by Blank, before she completed her presentation. Besharov asked if the poverty thresholds should be changed in a manner that affects the distribution of government benefits that are tied to the poverty line. Blank noted that there are ways to “grandfather” people and geographical areas so the level of their benefits is not affected; she added that use of the CPI-U-RS to adjust for inflation also changes the level of the thresholds, which has distributional implications. Charles Murray said that adjustments could be made to arrive at the same arbitrary number of people in poverty, because, if not, people may not accept the changes. Besharov noted that when congressional redistricting is calculated, the prospective changes are fairly easy to predict; if we propose changes to the poverty thresholds that affect the distribution of benefits, Congress will certainly notice. Reischauer said that no one knows what actions a state will take concerning its benefit structure in five years, and Blank added that the best indication of what a state will do in the future is what it has done in the past.

Blank then addressed the specific adjustments in the alternative measures of poverty that were presented by Weinberg. She said that she agreed with Reischauer about his concerns with using household income rather than family income to determine poverty status. Specifically, she said that more evidence is needed about income sharing in cohabiting versus married couples. Blank said that evidence from the Panel Study of Income Dynamics (PSID) suggests that cohabiting couples share more income than unrelated individuals, but less than married couples, and she does not know where to draw the line.

Blank said that the valuation problems in the estimation of the return to home equity are similar to those associated with the valuation of medical insurance—and the group decided not to value medical insurance because it is too difficult to do. Blank noted several problems with valuing the return to home equity:

- (1) Valuing the return to home equity has a huge effect on poverty estimates for seniors;
- (2) If an income stream is estimated, it is not clear that it would all go to rent, in the same way that we are not sure that every dollar estimated for medical insurance would go to medical care;
- (3) There are many out-of-pocket housing costs that need to be accounted for, and the cost of homeownership for seniors who are poor is high; and
- (4) It is very difficult to estimate the return to home equity. Concerning the fourth point, Blank noted that the Census Bureau matches people in the Current Population Survey (CPS) to the American Housing Survey (AHS) to obtain estimates of the equity in a home, but the procedure is problematic because the AHS has a much smaller sample and matches are often not obtained because they involve several variables.

Blank said that the Census Bureau is doing the best it can with the procedure, but there are enormous sources of error.

### **Group Discussion**

The group then discussed Blank's comments on the difficulty of estimating the return to home equity. Weinberg said that Blank was correct about the difficulty of the imputation procedure, but he thought that these problems were minor compared to the difficulty of estimating out-of-pocket costs for housing expenses. Reischauer inquired what would happen to the estimation procedure if people took a "reverse mortgage" on their homes, and Weinberg replied that this would reduce the return since home equity would become smaller. Michael O'Grady noted that by putting a value on the return to home equity, we are treating it as if it were an income stream. John Weicher said that reverse home equity mortgages are income, but there are fewer than 100,000 seniors with these types of mortgages and most are over seventy-five years old. Weicher added that home equity has real value, but owners typically do not incur large out-of-pocket costs for housing so this is not a significant problem. He also said that it is important to keep expenditures separate from income when estimating a return to home equity. Blank said that income will be overcounted if expenses are not factored in, but Weicher still thought that it was important to keep expenses out of the equation because the intent is to derive an income measure.

The seminar group addressed the issue of whether Social Security payments should be included as income in the pre-tax, pre-means-tested measure of poverty in the tabulations. Blank noted that Social Security is social insurance, but it also has a means-tested component. Reischauer said that Social Security is not means-tested because it is related to lifetime earnings. Blank said that Social Security has had a redistributive effect on low-income individuals, and if we change how we treat Social Security then the effect is lost. Reischauer said that the best approach is to include all transfers in the post-transfer measure to show the effect of the government sector. Besharov noted that when the concept for a pre-transfer measure was being

developed, the group asked the Census Bureau to keep Social Security in pre-transfer income because we did not have a good pre-transfer measure for seniors. Blank said there is a problem in how all transfers are treated in an exercise that attempts to measure the effect of benefits because there is not a counterfactual—in other words, people might have changed their behavior if the transfer did not exist.

Weicher expressed concern that surveys may be overestimating the number of college students as poor if only their own income is counted and not their parents' income. Weinberg clarified that in the Decennial Census, college students are counted where they reside (which could be in a dormitory), so if they are not living with their parents then the parents' income would not be counted. In the CPS, however, which is the basis for the tabulations under discussion, college students in group quarters (e.g., dormitories) are counted as living at the parents' residence (even if they are in a dormitory) so the parents' income would be included.

Besharov asked the seminar group to address the issue of whether the estimated number of poor people needs to stay the same under alternative approaches to measuring poverty. There was no general agreement on this point. Rector said that he regards the poverty measure as a vanguard for redistribution, so the estimated number of poor does not need to remain at the same level. He said that there is no agreement among experts or policy makers about what the poverty thresholds should be and what should be counted as income, but it is possible to talk about whether people have adequate nutrition and accessories such as television sets. He stated that there is no reason for the estimated number of poor to stay at the same level. Charles Murray said that the current measure is not really counting the poor. He said that even if the estimated number of poor remains the same, if the right changes are made there will be less mismatch and the estimate will be closer to who really is poor.

The discussion then focused on the importance of obtaining a good estimate of poverty. Blank said that there are two reasons why the percent of people below the poverty line should be estimated correctly: (1) To reduce the degree of mismatch, and (2) To be able to measure the effects of policies over time. Reischauer observed that we might be able to reduce the number of people who are poor, but still not be able to capture the individualized experiences of people who are poor. O'Grady said that it is very difficult to individualize experiences and that is why we work with averages, while Reischauer said that the proper approach depends on the purpose for which the data are used. O'Grady said that it is important to measure the effect of changes in policy. The distribution of benefits to states is always an issue, and a practical measure is needed to show how the distribution changes under alternative approaches.

Wade Horn said that he was very interested to learn more about the issues Murray raised concerning the extent to which we know there are anomalies in the data on poverty—not just anecdotes, but evidence. Murray said that while working on a project involving the PSID, he and Greg Duncan developed a measure of the working poor, but found that it did not capture people's actual living conditions. For example, it costs much more to live in a large city in the East than in the Midwest, but our current and proposed poverty measures do not capture this difference. Murray concluded that the difference between how a person lives and what the

poverty measure indicates is huge. Horn said that he wants to come up with a welfare dependency index that is equivalent to the unemployment measure. He posed the question of whether the poverty measure is an effective tool for distributing money to the states, or whether there is something fundamentally wrong with it? Horn said that he did not agree with the notion that we need to end up with the same estimate of poverty that we now have, but he was more interested in finding out what poverty really looks like and what it means to live in poverty.

There was discussion concerning how the characterization of poverty depends upon how it is measured statistically. Rector observed that under the current measure of poverty, people do not have the type of hardship that we associate with poverty. He said that the current measure distorts the picture of who is poor, and for a better understanding analysts need to look at living conditions. Besharov said that in earlier discussions, there was a consensus that health benefits could not be included in the current poverty measure, which is why they were excluded (even though the Census Bureau has produced estimates on the value of Medicare and Medicaid). Besharov also clarified that the earlier discussion about the distribution of benefits to states concerns formula grants, not individual benefits, because the latter are determined based on an individual's personal situation. When asked about the effect of using household income rather than family income to determine poverty status, Weinberg noted that the poverty share for persons eighteen to twenty-four years old falls by between 15 and 25 percent, depending upon the income measure that is used.

## **Daniel Weinberg's presentation: Part II**

The second part of Weinberg's presentation focused on the use of a post-tax, post-means-tested transfer measure of income to examine the anti-poverty effectiveness of government benefits. He noted that the combined effect of taxes (including the EITC) and government transfers would lower the percent of people below the poverty line by between 2 and 2.5 percentage points, or by around 20 percent. Starting with the official poverty rate of 12.1 percent in 2002, using a post-tax, post-means-tested transfer measure of poverty (with the return to home equity) would lower the percent of people below the poverty line by more than 3 percentage points; and using the three-parameter equivalence scale, the CPI-U-RS, and household income would lower the percent of people below the poverty line by another 3 percentage points. These adjustments combined would lower the percent of people below the poverty line to 6.0 percent. Weinberg noted that one can use these estimates to compute the percentage reduction in pre-transfer poverty rates (as defined here) due to taxes and means-tested transfers. Overall, for families, the range for reductions is from 19.0 percent (the percentage reduction for the official threshold CPI measure that includes home equity) to 27.5 percent (the percentage reduction for the three-parameter RS measure that excludes home equity). For households, the reductions are in roughly the same range: from 21.0 percent to 30.1 percent.

Weinberg then compared the anti-poverty effectiveness of taxes, transfers, and the return to home equity on the percent of children and seniors below the poverty line. He concluded that children have an advantage over other groups through government intervention since many government programs are directed to them, but the return to home equity does not have much of

an effect on the percent of children below the poverty line. In contrast, the return to home equity has a significant effect in reducing the percent of seniors below the poverty line, since many of them own their own homes. Government transfers also significantly reduce the percent of seniors below the poverty line. (The effect of Social Security, the largest benefit received by seniors, does not show up in this analysis because it was already included in the pre-tax, pre-transfer income measure.) The percent of seniors below poverty is higher using household income rather than family income, which suggests that seniors may have a different household composition than younger people. Weinberg noted that, on average, the anti-poverty effectiveness of government taxes, transfers, and the return to home equity results in about 20 to 26 percent fewer children and seniors below the poverty line.

Concerning the distribution of poverty shares by state, Weinberg noted that the variation in the share of the poor by state is larger for the post-transfer measures than the pre-transfer measures and is larger for households than families. Besharov asked if these results were being driven by the fact that some states are more generous in providing benefits than others, and Weinberg responded that this could well be the case. Besharov noted that the effects also depend on where people are clustered around the poverty line, because there might be tighter clustering in some states than others.

### **Robert Reischauer's Part II Comments**

When looking at the anti-poverty effectiveness of government transfer programs, Reischauer made a distinction between entitlements and non-entitlements to guide how benefits are counted. Entitlements include programs such as the EITC, TANF, SSI, and food stamps. Non-entitlements include programs such as WIC, school meals, housing assistance, and energy assistance. Reischauer said that it was important to understand the anti-poverty effects of entitlements and non-entitlements separately. He also inquired about local sales taxes, which have risen rapidly in some states, and whether they are reflected in the CPI.

Discussion focused on the tax and housing issues raised by Reischauer. Weinberg said that while the Census Bureau does not currently make estimates of state or local sales taxes in its tax model, it could produce such estimates. David Johnson noted that expenditures recorded in the Consumer Expenditure Survey conducted by BLS account for sales taxes. Besharov said that it is important to know about the situation of people who get housing assistance, and Weinberg noted that it has a large effect on the people who receive it. Reischauer said that if estimates of housing assistance are only going to be used nationally, then the issue is not that important; the concern is about making small area comparisons where housing values differ widely. Robert Greenstein said that subtracting only income taxes creates a problem, because some states have income taxes and other states have sales taxes. He also noted that, concerning housing assistance, there are large differences in housing prices across areas and that getting a housing voucher in an expensive area may cause a person to not be counted as poor. Weinberg noted that the Census Bureau's methods of valuing housing assistance need work. He said that it makes sense to use hedonic regressions for deriving average values, rather than to use location-specific variables.

## **Rebecca Blank's Part II Comments**

Concerning the use of post-tax, post-means-tested transfer income to measure the anti-poverty effectiveness of programs, Blank said that it was important to account for work-related expenses and child care. She said that it was particularly important to account for child care because huge policy changes involving child care were embedded in welfare reform. Blank said that although the needed data on work-related expenses and child care may not be available from the CPS, they could be obtained from the Survey of Income and Program Participation (SIPP). Besharov asked Blank a hypothetical question: Assume that half of the people working who are under poverty receive a child care subsidy, and assume that the average child care subsidy is about \$5,000. If the average number of children in a family is about 1.5 children, does this mean that we would add \$7,500 on average to the income side of these families before determining their poverty status? Blank said that she did not think the value of child care subsidies was that high, but added that there are ways of assigning reasonable amounts, just as we deal with ways to value other benefits such as housing subsidies.

## **Robert Rector's Part II Comments**

Rector said that he was dissatisfied with the way that the government treats noncash benefits for determining poverty status, particularly the way it handles housing and medical subsidies, and argued in favor of counting these benefits in income. He noted that housing subsidies now amount to about \$20 billion per year, or about \$6,000 per household, and yet they are not counted as income in the official poverty estimates. This is similar to saying that these subsidies have no anti-poverty effectiveness, which many people would regard as nonsense. He argued that there are ways to value the benefits for specific housing units in specific neighborhoods. He thought that if more money were being spent on housing subsidies, or, in general, spent on raising living standards, then these funds should be counted (at the level provided by the government). Congress may decide to cash these benefits out if they are worth less to individuals, but the amounts should still be counted.

Rector also thought that it is important to count medical benefits, even though such benefits are not being considered by the seminar group. He noted that no medical assistance was being provided when the War on Poverty commenced, and now approximately \$200 billion a year is being spent on Medicaid. Medical benefits are definitely raising people's living standards, even if not at the same level as what is being spent, and to ignore these benefits distorts the trend line on the number of poor people because a large part of their resources is missed. Rector expressed support for the fungible value method of medical benefits being used by the Census Bureau, and said that to ignore an item such as medical benefits (which now amounts to about 3 percent of Gross Domestic Product) presents a misleading picture of poverty.

## **Daniel Weinberg's Presentation: Part III**

The third part of Weinberg's presentation dealt with the adjustment for unreported income in the CPS ASEC and how this affects poverty estimates. Using information on

unreported income from the October 2004 poverty seminar, Weinberg reviewed the extent of underreporting on income reported in the CPS ASEC. For income year 2001, the BEA recorded state personal income of \$8.670 trillion, compared to CPS money income of \$6.446 trillion, a difference of \$2.233 trillion. However, after adjustments to BEA state personal income (SPI) are made to derive a concept consistent with the Census Bureau's definition of money income, the difference is lowered to \$806 billion, of which about half is due to imputations made by BEA for unreported income.

Weinberg then noted how the \$806 billion gap between Census money income and BEA SPI breaks down for specific types of income recorded in the CPS. Compared to BEA estimates:

- CPS wages and salaries are underreported by about 3 percent (about \$158 billion of the gap);
- CPS self-employment income is underreported by about 48 percent (about \$302 billion of the gap);
- CPS interest and dividends are underreported by about 32 percent (about \$132 billion of the gap); and
- Transfer programs are underreported by about 32 percent (about \$199 billion of the gap).

For the purpose of the poverty estimates he presented, Weinberg noted that adjustments for unreported income were made only for the following transfer benefits: TANF, SSI, and food stamps (based on the Urban Institute's TRIM model). These adjustments were made by John Coder of Sentier Research, since Census Bureau analysts are not familiar with the adjustments used in the TRIM model. Coder used a public-use file to make the income imputations, so they may differ slightly from those that would be obtained using internal Census Bureau files. Weinberg also noted that statisticians at the Census Bureau have expressed a concern about undercoverage of the low-income population in the CPS ASEC, which could affect the reliability of the income imputations if all imputed income is assigned to too few low-income people.

There was discussion about why the Census Bureau had focused only on transfer payments in its adjustments. O'Grady asked why the Census Bureau had not attempted to adjust for underreporting of wages and salaries, self-employment, and interest and dividends in the CPS ASEC. Weinberg replied that the Census Bureau does not have models to adjust for these income types at the micro level, although BEA makes adjustments at the macro level. Besharov noted that it is mainly a resource issue, and that it would be desirable to make adjustments across the entire income distribution. Weinberg agreed that making such adjustments is desirable.

Weinberg then discussed the effect of adjusting for unreported income on poverty estimates. After repeating how the use of the various alternative adjustments would lower the percent of people below the poverty line from 12.1 to 6.0 percent, Weinberg noted that adjusting for these three types of unreported income would lower the percent below poverty further, to 5.0



percent.

In terms of the effect of the various alternative estimates on the percent of people below the poverty line, Weinberg noted that the order in which the calculations are made is very important. For example, Weinberg said he was asked if counting the value of food stamps had a large effect on the percent of people below the poverty line. He noted that since people are not spread uniformly around the poverty line, the order in which the benefits are counted is important, so it is difficult to attribute reductions in the percent of people below the poverty line to any particular benefit. Don Oellerich also agreed that the order in which benefits are counted is important for measuring their effect on poverty, and O'Grady suggested that emphasis should be placed on measuring the total effect of benefits.

Weinberg concluded by reporting the effect of adjusting for unreported income on the total percent of people below the poverty line and on poverty shares for children. For the entire population, adjusting for unreported income (after all other adjustments have been made) would lower the total percent of people below the poverty line from 6.0 to 5.0 percent in 2002. For children under eighteen years old, adjusting for unreported income (after all other adjustments have been made except the return to home equity) would lower the poverty shares change index to 86.3, which indicates that their share of the poverty population would be 13.7 percent lower after adjustment. O'Grady asked how large the effect would have been if SIPP were used instead of the CPS, and Weinberg replied that he did not know because comparisons had not been made across surveys.

### **Rebecca Blank's Part III Comments**

Blank noted that it is very difficult to allocate unreported income correctly in household surveys. She said that there could be a problem if the living arrangements of children are not reported correctly in the survey, making it difficult to assign an imputed income amount to a specific individual. Blank said that she would like to obtain additional information on who gets the imputed income, and how this compares with administrative sources. Weinberg replied that he did not know the details to address Blank's question. Richard Bavier added that there are other complications in the CPS because survey persons are recorded in March while their income is recorded for the previous year; this can have a large effect for people experiencing changes in living arrangements. Blank said that if adjustments are made for unreported income, then the poverty thresholds need to be adjusted as well because they were developed based on data that did not adjust for underreporting. Besharov pointed out that underreporting of income was not as large a problem when the thresholds were established, and that food stamps were not as widely available. Blank also endorsed the notion that if adjustments for unreported income are going to be made, they need to be done for people at all income levels.

The discussion then turned to how unreported income is assigned to the CPS ASEC data using the Urban Institute's TRIM model. Oellerich said that to adjust TANF for underreporting, annual amounts from the survey are divided into monthly amounts, eligibility is determined, and participants are randomly assigned in the survey until monthly targets from administrative data

sources are met. People who receive and do not receive benefits are included in the calculation.

### **Robert Rector's Part III Comments**

Rector returned to a discussion of how much money is missed by household surveys. He noted that the CPS misses about \$2 trillion—not just for the poor, but for people throughout the income distribution. He said that we should not be satisfied with the income that the CPS counts because it understates resources available in the country. Rector made four major points:

- (1) Make comparisons with administrative records and determine how close the survey data are to the administrative data before and after adjustments are made;
- (2) Interest and dividends are very important sources of income for seniors, and matches to administrative records are needed to capture the full value of these income types;
- (3) If the wage base is underreported, the amount paid out under the EITC may also be underestimated; and
- (4) Income used in income-based measures of poverty will always be underreported. Estimates of consumption compared to income suggest that people may be making substantial cash income in the informal sector.

Concerning his third point, Rector said that if IRS figures are accurate, wages in the CPS are significantly underreported. Wages in the CPS also need to be adjusted for underreporting because this could have an effect on estimates of child poverty. Besharov noted that the amount of the EITC is imputed in the CPS and wondered how to handle any overpayments if CPS and IRS data are compared

Rector said that income earned in the informal sector is not likely to be reported to the Census Bureau or the IRS. He said that such income could amount to 1.5 to 2 percent of GDP (or about \$200 billion). He speculated that such income is probably not reported well in BEA's National Income and Product Accounts (NIPAs). Rector said that these problems make the estimation of poverty difficult. Even if data sets are matched together to resolve the inconsistencies, there will still be a large informal sector that is not measured. Weinberg noted that the \$806 billion shortfall of income in the CPS included \$104 billion for the informal sector.

### **Robert Reischauer's Part III Comments**

Reischauer generally agreed with efforts to improve the poverty measure, but reiterated why it is so difficult to count medical benefits (even though they are not counted in this exercise) and noted complications arising from the adjustment for unreported income. He said that most expenses for medical care are paid for by third parties, and are not fully represented in the CPI. Reischauer said that if people were paying the full cost of medical care by themselves, the poverty thresholds would need to be adjusted to a much higher level. He said that the poverty

measure has broad acceptance among the media, the general public, and the Congress. This broad acceptance comes from the feeling that the poverty measure is derived from real data and is not synthetic. If we rely on too many imputations, Reischauer argued, then the poverty measure starts to lose its credibility. Therefore, he thinks that the emphasis should be on obtaining better data rather than making more imputations. Reischauer is cautious about making imputations because we cannot do everything equally well. He also said that if imputations are made, it is important to do them across the income scale, because some other income types (such as self-employment income) are likely to be significantly underreported.

Concerning adjustments for unreported income using the Urban Institute's TRIM model, Reischauer added to Oellerich's explanation of how adjustments are made. The TRIM model uses state enrollments in transfer programs, applies state rules, and assigns a new amount of benefits to people receiving TANF. Administrative data usually indicate more people and dollar amounts that are not accounted for after these adjustment are made. Therefore, the TRIM model randomly selects people most likely to receive benefits and assigns them amounts of income until the administrative controls are met. Reischauer said that there are inaccuracies in the procedure and the imputation methods could be improved. He also said that there should be concern about other types of income beyond transfers that are underreported.

## **Group Discussion**

The seminar participants engaged in additional discussion about the treatment of medical care and adjusting for underreported income in the CPS. Referring to a point about the payment for medical care made earlier by Reischauer, Louis Kincannon said that Americans pay for a substantial amount of medical care through insurance, taxes, and the purchase of products, but Reischauer insisted that third party payments are paramount for the poor. Murray noted that although unreported income creates a bias in survey data, if it is fairly constant over time it would not affect measured trends in income and poverty. Rector said that while CPS aggregate income as a percent of BEA NIPA income has remained about the same over time, underreporting for certain types of income has become worse, and this has made the estimates less accurate for people at the bottom of the income distribution.

Besharov asked if analysis might be conducted to arrive at a better method for measuring and adjusting for unreported income in surveys. O'Grady noted that the Commerce Department and HHS were participating in the seminar, but not the IRS, and while the situation could be improved, it could not be solved completely. Rector said that the CPS is designed primarily to measure employment and unemployment, so it is not particularly adept at measuring the various types of income that people receive. He said that there was a need to check the survey data against administrative data to make the adjustments.

O'Grady asked if people would be comfortable moving away from survey data and considering new approaches. He raised the issue of using administrative data, and said that there could be a shift away from the collection of data to arrive at a new level of analysis. He admitted that this would be a big change from the way that survey data are now used to produce the

official poverty numbers.

Wade Horn noted that problems can occur when analyzing state-reported data about TANF recipients. He said, for example, that when state-reported TANF caseloads are matched against the National Directory of New Hires, a national database including, among other things, all newly filed W-4s, one finds significantly more TANF recipients are working than one would conclude looking at the state-reported information alone. If these same TANF recipients are also reluctant to report the fact that they are working to the Census Bureau, which is, after all another government agency, it would mean significant underreporting of work and earnings for many low-income families in the CPS as well.

Seminar participants emphasized the importance of being very careful when making imputations for missing income. Reischauer said that NIPA concepts need to be adjusted to Census concepts before shortfalls in reported income are noted, because the NIPA includes some concepts (such as endowments) that we do not normally think of as income to an individual. O'Grady said that an important consideration when making imputations is when is it a survey, and when is it more than a survey? The major objective is to understand what is going on, how we can measure it, and how it affects policy.

## **Conclusion**

Kathleen Cooper thanked the seminar participants for an enlightening discussion. She said that she likes to think that people do answer Census Bureau surveys differently than how they report to government programs such as TANF. Cooper noted that the efforts of the seminar are to improve the poverty measure, not destroy it. She said that we do not yet know whether we will be able to agree on adjustments that should be made to the poverty measure, but we have certainly made progress in understanding the issues and laying out some of the options.

Besharov noted that the tabulations presented at the seminar were done very deliberately, based on the seminar participants' discussions. He said that following this meeting, the focus will be on exploring modifications to the poverty measure that are feasible, with an emphasis on the anti-poverty effectiveness of the post-tax, post-means-tested transfer income measures and areas outside the distribution of benefits.