

Poor Old Folks: Have Our Methods of Poverty Measurement Blinded Us to Who is Poor?

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November 1995

David M. Betson is currently on leave at the Office of the Assistant Secretary of Planning and Evaluation, Department of Health and Human Services, Washington, DC. This paper represents the views of the author and does not reflect the views of the Department of Health and Human Services nor any other government agency. The author wishes to thank Connie Citro for her comments and suggestions on an earlier version of this paper.

Introduction

Conventional wisdom in poverty research states that children are at greater risk of being poor than are the elderly. In 1993, the Census Bureau reported that the poverty rate for children was 22.7 percent while the poverty rate for the elderly was 12.2 percent. But is conventional wisdom correct? Or has how we measure poverty biased our thinking?

In a recently published report, *Measuring Poverty: A New Approach*, the National Academy of Science's Panel on Poverty and Family Assistance reports estimates of how recommended changes in poverty measurement methodology would affect our concept of who is poor in the U.S. If the Panel's recommendations were adopted, the Panel estimated that individuals in poverty would be more likely to be working; poor children would more likely to be living in families where both parents reside; and poor individuals would be less likely to be receiving cash or in-kind benefits from the government. But equally important, the number of children and elderly poor would remain roughly the same. Conventional wisdom about the incidence of poverty by age was upheld.

Recently, the Urban Institute has produced estimates of the poverty population that would challenge this view. They have begun work which examines the impact on the composition of the poverty population resulting from the implementation of a subset of the Panel's recommendations aimed at creating internal consistency on the resource side of the poverty definition: (1) adding the value of in-kind food and housing benefits; (2) subtracting federal and state income taxes as well as counting the Earned Income Tax Credit (EITC); and (3) subtracting the medical out-of-pocket (MOOP) expenditures from the current definition of census money income. Utilizing the 1994 March CPS which was corrected for underreporting of government benefits, the Urban Institute has estimated that the poverty rate for children is significantly overstated while that of the elderly is vastly understated. In 1993, the Urban Institute estimates that using the official Census poverty definition but correcting for underreporting of income, the poverty rate for children would be 22.3 percent, while for the elderly it would be 11.9 percent. But if the above three Panel recommendations were implemented, the poverty rate for children would fall to 16.7 percent; at the same time the poverty rate for the elderly would rise to 19.8 percent. Conventional wisdom is stood on its head.

The questions that this paper raises are twofold. First, why didn't the Panel report such a shift in relative poverty rates? Second and more importantly, has conventional wisdom been overturned?

Reconciling the Estimates

It is important to remember that the NAS Panel did not propose a specific poverty measurement but a framework from which a poverty definition could be selected by policy makers. The Panel's goal in making their recommendations was to update the poverty methodology to reflect current standards of living of the population as

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well as to restore the measure's internal consistency. The Panel did not feel that there was sufficient scientific justification to make specific recommendations on two components of their proposed methodology. These two components were the choice of the poverty threshold for the reference family of four and the specific choice of parameters for their proposed equivalence scale formula. In order to demonstrate the combined impact of the entirety of their recommendations, the Panel reported four sets of estimates representing specific choices on each of these two dimensions. Specifically, they presented two sets of thresholds, one set which produced an overall poverty rate equal to the official definition and a second set which reflected the midpoint of the Panel's recommended procedure to set the reference poverty threshold. The Panel also presented estimates which represented the bounds of what they believed to be reasonable choices for the amount of economies of scale for an equivalence scale, .75 and .65. These published estimates as well as the Urban Institute's are presented below.

	Total Population	Poverty Rate of :	
		Children	Elderly
NAS Panel (1993 March CPS)			
Census Bureau Definition (Official for 1992)	14.5%	21.9%	12.9%
Panel Recommendations :			
Equal Rate, Scale Factor = .75	14.5	21.7	10.8
Equal Rate, Scale Factor = .65	14.5	20.6	12.4
\$14,800, Scale Factor = .75	18.1	26.4	14.6
\$14,800, Scale Factor = .65	19.0	26.4	18.0
Urban Institute (1994 March CPS)			
Official Rates for 1993	15.1	22.7	12.2
Census Bureau Definition (corrected for underreporting of income)	14.9	22.3	11.9
Revised Resource Definition	14.0	16.7	19.8

In 1992, the poverty rate of children exceeded the rate for the elderly population by 70 percent. The set of estimates which utilize a poverty threshold chosen to generate an equal overall poverty rate indicate that the poverty rates of both groups decline although not by a significant degree. The choice of economies of scale factor does significantly affect the relative poverty rates of these two demographic groups. If the .75 scale is employed, the poverty rate of children is 101 percent greater than that of the elderly. If .65 is used, the gap between the incidence of poverty of the groups narrows, but still the poverty rate of children exceeds that of the elderly by 66 percent. If

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\$14,800 is utilized as the threshold for the family of four, the absolute level of poverty incidence in these two groups is predicted to rise although there is a similar pattern of relative poverty rates. The use of .75 as the economies of scale factor in combination with all the other Panel recommendations widens the relative gap between children and the elderly while the value of .65 narrows the gap. In all examples presented in their report, the Panel never found an elimination of the current gap in poverty rates between these two groups.

In 1993, the official poverty rate of children rose while the incidence of poverty among the elderly declined. This trend led to an increase in the relative percentage difference in the two groups' poverty rates to 87 percent. Yet even with this growing relative gap between children and the elderly, the Urban Institute's estimates suggest that a redefinition of the resource base for poverty measurement would lead to a situation in which the child poverty rate is 16 percent lower than that of the elderly. The gap would not only be eliminated, it would be reversed.

The first major problem in reconciling the two estimates was a difficulty of comparing apples with apples instead of comparing apples with oranges. The Urban Institute had produced estimates of the poverty population that implemented only a subset of the Panel's recommendations. In particular, they had implemented the following recommendations :

- adding in-kind food and housing benefits;
- subtracting federal and state income and payroll taxes and adding the value of the EITC; and
- subtracting the unit's medical out-of-pocket (MOOP) expenditures.

In developing their estimates, the Urban Institute had included estimates of the 1996 EITC deflated in real terms back to 1993. The data were also "corrected" for underreporting of government benefits.

Thus at the start, major differences existed between what the Panel had assumed in making their estimates and what the Urban Institute had included. In particular, they had not implemented the following recommendations made with respect to the resource and threshold sides of the poverty definition :

- subtracting work related expenses and child care;
- adopting a revised set of equivalence scales;
- adjusting the poverty threshold to reflect geographic differences in the cost of living; and
- adopting a poverty threshold for a family of four that reflects basic needs of food, clothing and shelter in today's society.

Also the Panel had used reported and not adjusted amounts of income and means-tested cash benefits. Nor had they employed an out-year set of values for the EITC, they had used values for the EITC which were in effect in 1992. And finally, the Panel's estimates pertain to 1992, a year earlier than the Urban Institute. The underlying differences between the two groups are summarized in the following table.

Comparison of NAS Panel and Urban Institute Assumptions		
	NAS Panel	Urban Institute
Data Base	93 March CPS	94 March CPS
Underreporting Correction	NO	YES
Add In-Kind Food and Housing Subsidies	YES	YES
Subtract Taxes	YES	YES
Program Year for EITC	1992	1996
Subtract MOOP	YES	YES
Subtract Work Related Expenses and Child Care	YES	NO
Adjust Thresholds for Geographic Differences in Cost-of-Living	YES	NO
Equivalence Scales	Panel's Recommendation	Implicit in Current Thresholds
Poverty Threshold for Family of Four	Set so that Overall Poverty Rate remains same as 1992	Current Poverty Thresholds

Many of these differences could provide an explanation for why the Panel's estimates differed from what were produced by the Urban Institute. The Urban Institute's use of the more generous 1996 EITC instead of the 1993 program parameters should have created a substantially lower poverty rate for children without affecting the poverty rate of the elderly. Not subtracting work related expenses and child care would have had a similar effect of creating a lower children's poverty rate than what would have been present in the NAS Panel's scenario. The use of the equivalence scales implicit in the current poverty thresholds as compared to the Panel's recommended scales would tend to overstate the poverty rates of the elderly. The anticipated impacts of other differences, such as the year employed, correcting for underreporting, and the poverty threshold for a family of four, are less clear with respect to their impact on the relative incidence of poverty between these two groups.

The next step in reconciliation was to replicate the work of the Urban Institute as closely as possible using the Panel's data. In producing their estimates, the Urban Institute provided an "incremental" comparison of the effect of each of the three changes to the resource base. That is, they first added the value of in-kind benefits, then subtracted taxes while adding the EITC, and then subtracted medical out-of-pocket expenses. These "incremental" estimates differ from the "marginal" estimates which were presented in the Panel's report. The Panel's estimates of the "marginal" impact of a separate recommendation were estimated by implementing only one recommendation at a

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time and comparing it to the current poverty population. The following table compares the Urban Institute estimates with those produced using the Panel's data.

	Poverty Rate of :		
	Total Population	Children	Elderly
NAS Panel Data used in Published Report (1993 March CPS)			
(1) : Census Money Income	14.5%	21.9%	12.9%
(2) : (1) and Add In-Kind Benefits	12.9	19.2	11.0
(3) : (2) and Subtract Taxes (1996 EITC)	12.3	17.3	11.1
(4) : (3) and Subtract MOOP	14.9	20.6	14.2
Urban Institute (1994 March CPS)			
(1) : Census Money Income (adjusted)	14.9	22.3	11.9
(2) : (1) and Add In-Kind Benefits	11.6	16.6	9.1
(3) : (2) and Subtract Taxes (1996 EITC)	10.9	14.5	9.1
(4) : (3) and Subtract MOOP	14.0	16.7	19.8

While there many interesting comparisons to make with these estimates, for our purposes it is instructive to compare how the inclusion of each recommendation affects the relative poverty rates between children and the elderly. In the table below, the ratio of the poverty rate of children to the elderly is presented.

	NAS Panel	Urban Institute
(1) : Census Money Income	1.70	1.87
(2) : (1) and Add In-Kind Benefits	1.75	1.82
(3) : (2) and Subtract Taxes (1996 EITC)	1.57	1.59
(4) : (3) and Subtract MOOP	1.45	.84

This table provides some clues as to why the two estimates differ. First, the addition of in-kind food and housing benefits does have a small differential impact on the poverty rates of these groups. The NAS Panel data set, which uses Census Bureau imputations of housing subsidies and reported values of food stamps, suggests that inclusion of these benefits would lead to a larger relative gap. The Urban Institute data set, which imputes food stamps and housing subsidies to reach administrative control totals, leads to a narrowing of the gap. While this difference may be important, it is quite small and most likely is not the primary reason for the different results. The

difference between imputation routines and accounting for underreporting is a topic to which we return to later in the paper.

Except for this difference, the two estimates yield similar results until MOOP is subtracted from the resource measure. While the subtraction of MOOP increases the poverty rates of both groups, the poverty rate of the elderly increases faster so as to narrow the relative gap between the two groups. Using the Panel's reported MOOP imputation, the children's rate remains 45% higher. But the differential impact of MOOP in the Urban Institute data is so great that their rates drops below the elderly. For another point of comparison, Weinberg and Lamas (1993) report the impact of their imputation of MOOP on poverty rates . In 1989, the ratio of the official poverty rate for children relative to the elderly was 1.72. After they had added in-kind benefits, subtracted taxes, subtracted MOOP, and reduced the poverty thresholds by 3.6 percent, the ratio of the poverty rate of children relative to the elderly fell to 1.19 indicating a more significant reduction of the child-elderly poverty gap than estimated by the Panel. Clearly, the differences in how MOOP was being imputed to the data may provide the key to accounting for the differences in these results.

Imputation of MOOP -- Aggregates

Imputing a variable to a database, such out-of-pocket medical expenditures, requires two steps: determination of the aggregate amount of the variable to be imputed and a mechanism to allocate the aggregate to individual records. Both steps can potentially have an important impact on the results of any poverty calculation which utilizes the imputed variable. Imputing too much MOOP in the aggregate could overstate the poverty rates, but it is equally important how one assigns MOOP to individual records to determine who is tagged as being poor. For example, one could assign the average amount of MOOP to every record in the CPS. Alternatively, one could try to replicate the distribution in the population, assigning some individuals zero MOOP, some individuals below average MOOP and others above average MOOP. In both cases the aggregate amount of MOOP would be the same, but we would expect there to be different poverty rates as well as different characteristics of who is poor.

While both steps of the imputation process are important, clearly comparing the aggregate amounts of MOOP is the easiest step to check. The following table presents the aggregate totals as well as the aggregate amount of MOOP assigned to the elderly and nonelderly populations.

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Aggregate MOOP (in Billion)			
	NonElderly	Elderly	Total
Urban Institute (1993)	\$169.2	\$62.1	\$231.3
NAS Published Data (1992)	173.5	35.9	209.4
Addition of Medicare Part B	173.5	45.9	219.4
Revised Control Totals (1992)	160.2	59.2	219.4

The Urban Institute's imputations employed a control total of \$231.3 billion dollars of MOOP for 1993. This aggregate amount was taken from the HCFA National Health Accounts. The elderly were assumed to spend 26.9 percent of this amount. The aggregate MOOP amounts for 1992 were provided to the Panel by the Agency for Health Care Policy and Research (AHCPR). However, total MOOP spending as well as spending by the elderly were significantly lower than the aggregates employed by the Urban Institute. When the Panel's aggregates came under question, AHCPR was asked whether or not these aggregates were still consistent with their thinking about MOOP spending. The answer was partly yes, partly no. First, they said that the aggregates that they had given the Panel had not contained Medicare Part B payments made by elderly individuals, which in 1993 were \$10 billion. Thus, the aggregates for both the elderly and the total population were \$10 billions too low. The third row in the above table reflects that revision of the totals. Now the aggregates for the two years are much more in line. The Urban Institute's total MOOP spending is 5.4 percent greater than the NAS revised figure, which is line with increases to be expected from inflation in the health care sector. However, the elderly share of the total MOOP spending, 20.9 percent, is still low compared to the Urban Institute. After a discussion with numerous health analysts in ASPE, it was decided that the Urban Institute's split between the elderly and the nonelderly was closer to what the evidence in the health care literature displays. In constructing a new set of estimates of MOOP for the Panel's database, it was assumed that 27 percent of the aggregate amount of MOOP was to be imputed to the elderly population. If these new controls are correct, then, in the data used by the Panel for the report, MOOP was slightly overstated for the nonelderly population but was only 61 percent of what it should have been for the elderly population.

Using these revised control totals for the imputation, I have recomputed the series of incremental simulations. The results of these new calculations are reported in the following table.

	Poverty Rate of :		
	Total Population	Children	Elderly
NAS Panel used in Published Data (1993 March CPS)			
(3) : (2) and Subtract Taxes (1996 EITC)	12.3	17.3	11.1
(4) : (3) and Subtract MOOP	14.9	20.6	14.2
Revised NAS Panel Data (1993 March CPS)			
(3) : (2) and Subtract Taxes (1996 EITC)	12.3	17.3	11.1
(4) : (3) and Subtract MOOP	15.4	20.1	20.3
Urban Institute (1994 March CPS)			
(3) : (2) and Subtract Taxes (1996 EITC)	10.9	14.5	9.1
(4) : (3) and Subtract MOOP	14.0	16.7	19.8

After revising the aggregate amount of MOOP and the allocation between the elderly and nonelderly populations, the poverty rate for the elderly now exceeds that of children. While the amount by which it does so is quite small, it is consistent with these estimates to say that the gap in children and elderly poverty rates is eliminated.

To add to our comparison among the various estimates, the following table was constructed to focus upon the percentage change in each group's poverty rate as MOOP is subtracted from the household's available resources. Note that this is the incremental change after in-kind benefits as well as taxes have been taken into account.

	Percentage Increase in Poverty Rate Due to Incremental Addition of MOOP	
	Children	Elderly
Published NAS Data	19%	28%
Revised NAS Data	16%	83%
Urban Institute	15%	118%

Revising the aggregate amount of MOOP spent by the nonelderly has brought the Panel's predicted impact on children very much in line with the Urban Institute. These estimates show that any further difference between the two estimates must lie with the estimates of the impact on the elderly.

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While this comparison of incremental impact of MOOP is informative, it is clouded by the fact that the other proposed changes of counting in-kind benefits and excluding taxes from the resource definition could be interacting with the consideration of MOOP expenses. To get a more pure effect of the treatment of MOOP, both the Urban Institute and I calculated how the poverty rate would change if just the MOOP was subtracted from the current definition of resources, Census Money Income. Note that in the Urban Institute data, Census Money Income is adjusted for underreporting of mean-tested cash transfer benefits. The results of these calculations are presented below.

Percentage Increase in Poverty Rate Due to Marginal Addition of MOOP		
	Children	Elderly
Revised NAS Data	10%	70%
Urban Institute	9%	90%

While the marginal impacts of the treatment of MOOP are smaller than the incremental impacts described above, a similar pattern emerges. The impact on children's poverty rate of the subtraction of MOOP from the resource definition is quite similar between the Panel and Institute's procedures: there remains a substantial difference for the elderly. I think the evidence is quite clear that the reason why the Urban Institute is predicting a reversal of the poverty rates of children and the elderly, while the Panel is predicting an equalization of their rates, lies with the differences in the methods by which the two groups allocate the total amount of MOOP to the elderly population. We now turn to a description of the two methods used in this allocation process.

Imputation of MOOP -- Distributing the Aggregates in Elderly Population

For the elderly population, the methods that the Panel and Urban Institute utilized to impute medical out-of-pocket expenditures to the CPS database differ not only in their methodology but the amount of detail they provide. The Urban Institute imputes to each record an amount of insurance premiums paid by the household and an amount of all other medical expenses incurred by the household. The amount of MOOP which is subtracted from the household's income is the sum of these two individual imputations.

The Urban Institute assigns premiums to the elderly based upon their insurance coverage, income, and age group. Persons with individually purchased plans are assigned the group mean for their age group. For persons with employer-sponsored insurance, a given percentage of the individuals falling into any income by age cell are

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assigned a zero contribution. The remaining individuals are assigned the average employee premium contribution in their age group. Finally, all elderly who are not enrolled in Medicaid are assigned the annual Medicare Part B premium.

For non-premium out-of-pocket expenses, the Urban Institute assigns values based upon their analysis of the 1987 National Medical Expenditure Survey (NMES). Their method assigns each elderly individual to an age, income, and insurance coverage cell. Within each cell, a certain percentage of individuals are assigned a zero amount of non-premium MOOP, another percentage are assigned a "below average" MOOP, and the remainder are assigned an "above average" MOOP value. To provide an illustration of their procedure, consider individuals who are over 75 years old, have an income which is 200 to 400 percent of their current poverty line, and have Medicare coverage as well as some employer-provided insurance. For individuals in this group, 8 percent would be randomly assigned zero MOOP, 76 percent would be assigned \$614 of MOOP, the remaining 16 percent of the group would be assigned \$8,163 of MOOP. These values are in 1993 dollars.

The Panel's method of imputing MOOP originally did not make a distinction between premium and non-premium MOOP payments by the elderly. They chose to impute to each elderly household the sum of these two amounts. However, when it became apparent that the original tables provided to the Panel did not contain payments made by households for Medicare Part B premiums, a slight change in imputation strategy was needed. The revised Panel imputations now first impute to each elderly person who is not a Medicaid participant an annual Medicare Part B premium. Then all remaining MOOP payments made by households headed by an individual over 65 are imputed in the following manner.

Based upon tabulations of an extract of the 1987 NMES data aged to 1992, the staff of the AHCPR provided the Panel detailed tabulations of MOOP for the elderly population by age (2 categories), by race (3 categories), by size of family (4 categories), by income (3 categories), and by insurance status (3 categories). There were 2,375 unweighted observations on elderly households included in the table. As one would expect, this table with 648 cells had many cells with few or no observations. The next step was to "collapse" the number of dimensions of the table so that every cell had at least 200 observations. Using this decision rule, we were able to construct a table with 8 cells described by two categories of age (65 to 74 or 75 and over), two categories of income (income less than 150% of the poverty line or income greater than 150% of the poverty line), and two categories of family size (single or two or more members). There were not sufficient numbers of observations to allow the table to consider differences in race or in insurance status.

The next step was to characterize the distribution of MOOP within each of the eight cells. This was done by taking the observations and computing the percentage of units which fell into the following ten categories based upon the unit's MOOP expenditures: \$0, \$1 to \$100; \$101 to \$500; \$501 to \$1,000; \$1,001 to \$1,500; \$1,501 to \$2,000; \$2,001 to \$2,500; \$2,501 to \$5,000; \$5,001 to \$7,500; \$7,501 to \$12,500; and more than \$12,500. Using

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this information within each cell, the percentage of the group who had no MOOP spending and the cumulative probability distribution for those units with MOOP could be computed.

At this point, we have described for each of the eight groups the cumulative density function for those who have MOOP, CDF(MOOP) as a step function. To smooth out the CDF, it was assumed that the function could be described as a logistic function. That is, if $P(X,MOOP)$ denotes the probability that a household with characteristics, X , has a level of medical out-of-pocket spending which is less than MOOP (measured in \$1,000) then

$$\text{LOG} \left[\frac{P(X,MOOP)}{1 - P(X,MOOP)} \right] = \beta X + \alpha \text{LOG}[MOOP]$$

The characteristics, X , which are included in the smoothing regression were

OLD75 = 1 if the head of the household was 75 years old or greater, 0 otherwise

FS2M = 1 if the household had two or members, 0 otherwise

NOT_POOR = 1 if the household's income was 150% or more of the poverty line, 0 otherwise.

For each of the eight groups, we had nine observations for the value of the CDF at the endpoint of each of the ten categories. The following regression coefficients were estimated from the data on the elderly.

Regression Coefficients for Elderly Population	
Constant	1.1050
OLD75	-.2004
FS2M	-1.4205
NOT_POOR	-.2610
LOG(MOOP)	1.4945

All the coefficients were significant at the 5% level. To interpret the coefficient on the three variables denoted the characteristics of the household, OLD75, FS2M, and NOT_POOR, the negative sign of all the coefficients imply that if individual has any of these three characteristics then the CDF at any given value of MOOP will be lowered and hence the probability of having that level of MOOP will fall. This is equivalent to moving the distribution of MOOP upward.

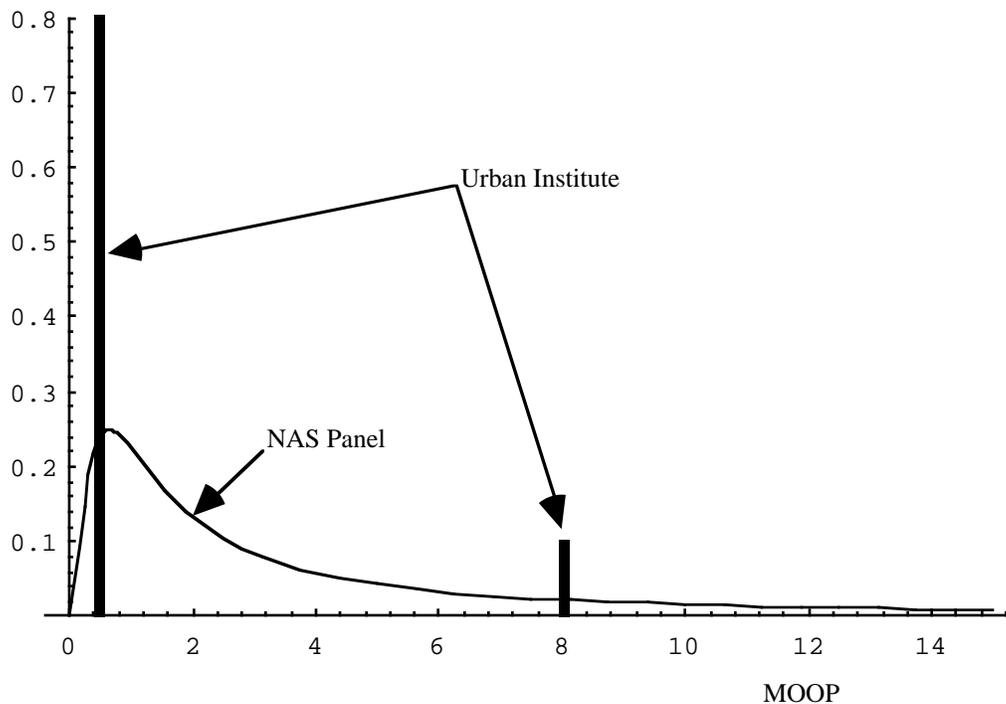
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This information was then used to impute a value of MOOP to each household that was headed by an individual 65 years or older in the following manner . If the household was on Medicaid, then a zero MOOP was assigned to the household. If the household was not on Medicaid, then the first step was to determine whether or not the household had MOOP. This was done by creating a uniform random variable. If the value of the random draw was less than the estimated probability of not having MOOP for the household characteristics (eight categories described above) then a zero value of MOOP was assigned to the household. Otherwise a nonzero value of MOOP was assigned. This was done by drawing another uniform random variable. Let this value be denoted as Z, which represents the percentile in the MOOP distribution to which this household is to be assigned. The value of MOOP which is consistent with this percentile can be computed from the above logistic functional description of the MOOP CDF. In particular,

$$\text{MOOP} = \text{EXP} \left[\frac{\text{LOG}[Z/(1-Z)] - \beta X}{1.4945} \right].$$

where X denotes the characteristics of the household and β are their respective estimated coefficients.

To begin comparing these two methods, the following figure examines the probability distributions for household's with MOOP. This graph assumes that the household is composed of a single individual who is more than 75 years old with employer-sponsored health insurance supplements to Medicare and whose income is twice the poverty line.



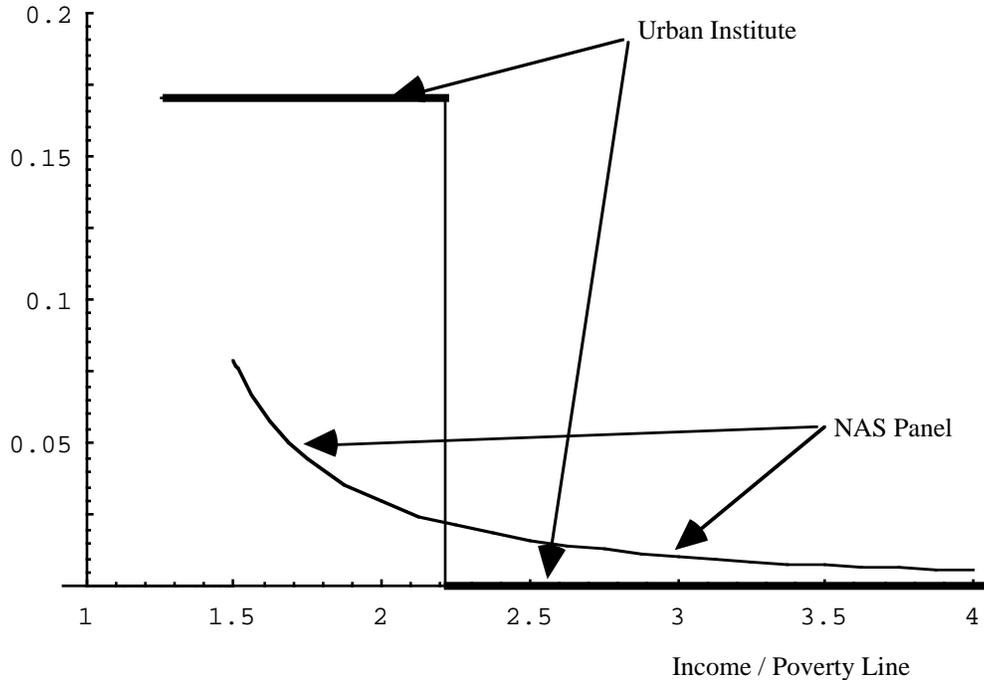
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While the NAS Panel represents the MOOP distribution as a continuous function, the Urban Institute assumes that the distribution can be characterized as two "spikes", one which contains 83 percent of the population at a below average value of MOOP and the remaining 17 percent at an above average value. If the distribution is truly continuous, then for a portion of those placed at either position, the value of the MOOP is an overestimate of their "true" MOOP. On the other hand there is a portion for which the value is an understatement of their "true" MOOP.

The implication of this insight for poverty measurement is difficult to grasp in this form. What may prove more helpful is to ask the question, as a function of income of the household, what is the probability that the subtraction of MOOP will place the household into poverty? In 1992, the poverty line for an elderly individual was \$6,729. Thus, in the Urban Institute imputation, an individual whose income is more than 125 percent, the particular one assumed in the description of this group, will be moved into poverty only if he/she is imputed with the higher value of MOOP spending, \$8,163. This will occur 17 percent of the time. However, as the individual's income increases, the amount of MOOP needed to push the individual into poverty increases, but in the Urban Institute imputation the probability that this needed amount will be imputed to the individual does not change. It remains at 17 percent. When the individual's income is more than 2.23 times the poverty line, then the imputed amount of MOOP is not enough for the individual to be placed into poverty. At this point the probability of getting put into poverty for the Urban Institute imputation goes to zero. Using the Panel's CDF function for this group, we can plot the probability of being placed into poverty. Both sets of probabilities are shown in the graph below.

Probability of MOOP
Putting an Individual
into Poverty

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This graph demonstrates that when an individual's income is between 150 and 223 percent of the poverty line then, the probability that the Urban Institute would place an individual into poverty because of their MOOP spending is two to seven times the probability under the Panel's procedures. When the individual's income is greater than 223 percent of the poverty line, the maximum probability that the Panel's procedure would place the household into poverty by their MOOP spending is 2.3 percent while under the Urban Institute's procedure the probability would be zero. This comparison is even more impressive if we recall that figures from the Urban Institute represent only non-premium MOOP spending while the figures from the NAS Panel represent all MOOP spending except payments made to Medicare Part B (the latter are imputed separately).

This comparison demonstrates that there is good reason to believe that it is the Urban Institute's method of imputation that has created the larger increases in the poverty rates of the elderly. For the nonelderly population, the Urban Institute utilized a regression model for non-premium MOOP that incorporates more of the variation in the MOOP distribution. This different modeling technique should make their results closely match the NAS Panel's modeling technique. The estimates presented above confirm this hypothesis.

Accounting for Underreporting

We have noted that a second major difference between the NAS Panel and the Urban Institute's data is that the Urban Institute has corrected their data to account for underreporting of all major cash and in-kind benefits. If households with children have a greater rate and amount of underreporting than the elderly, then correcting for underreporting should reduce the poverty rates for both groups but narrow the gap between the poverty rate of children and that of the elderly. Our knowledge is not vast on underreporting and its effect on poverty measurement. Our best information comes from comparing the SIPP with March CPS. It is acknowledged that the SIPP captures more income than does the CPS and if that were the only difference between the two databases, then a comparison of poverty rates computed on these two databases should give us a clue about the absolute and relative impact of underreporting of income and cash benefits. Short and Shea (1991) report that comparing the 1987 CPS with the SIPP data, the poverty rate for the total population on the CPS was 124 percent of what is measured on the SIPP. The children's poverty rate on the CPS was 115 percent of what was measured on the SIPP. The elderly's poverty rate on the CPS was 140 percent of the SIPP rate. If these relationships hold, then the poverty rates for the elderly would fall by more than the poverty rate of children if underreporting was accounted for in the CPS data. The gap between the groups would widen by 18 percent and not narrow. These SIPP/CPS comparisons are at odds with the Urban Institute data shown below.

Poverty Rates in 1993			
	Total Population	Poverty Rate of : Children	Elderly
Official Poverty Rates	15.1%	22.7%	12.2%
Urban Institute -- Current Definition (corrected for underreporting)	14.9%	22.3%	11.9%
Ratio of Official to Urban Institute	1.01	1.02	1.03

The impact of the Urban Institute correction for underreporting of income components of census money income is very small compared to what could be expected from moving from the CPS to SIPP although the relative impact on children and the elderly's poverty rates is consistent with Short and Shea analysis.

Earlier we presented estimates of the impact that the addition of in-kind food and housing benefits would have on poverty rates. Using reported food stamps and Census Bureau imputed values for school lunch and public housing benefits, the Panel estimated that the overall poverty rate would fall by 11 percent while the poverty rate for children

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and the elderly would fall by 12 and 15 percent respectively. Using foods stamps corrected for underreporting and their own imputations for school lunch and public housing, the Urban Institute estimated that the overall poverty rate would fall by 22 percent while the poverty rates for children and the elderly would fall by 26 and 24 percent respectively. This doubling of the impact of the treatment of in-kind benefits is quite surprising especially in light of how small was the impact of their correction for other forms of income.

The methods by which the Census Bureau and Urban Institute impute public housing to the files are reported to differ. At this time, I have not been able to acquire documentation of their procedures to comment. The question of how to adjusted for underreporting of income and benefits is also another area where future work will needed to be undertaken.

Equivalence Scales

As was noted earlier in the paper, the choice of equivalence scale has an impact, although secondary, on the relative number of children versus elderly who are considered poor. The Panel noted in their report that the current scale is plagued with numerous problems that should and can be addressed. In 1992, the poverty threshold for a single individual less than 65 years was \$7,299. If the same individual was 65 or older, their threshold would fall 7.8 percent to \$6,729. The Panel has recommended that differences in the thresholds based on age be eliminated. The Panel also recommended that the ad hoc scale values implicit in the current thresholds be replaced with an explicit formulation of the scale values. In particular, the Panel recommended that the scale values be derived from the following formula:

$$S(A,K) = (A + c K)^F$$

where A is the number of adults, K is the number of children, each of them to be treated as c proportion of an adult, and F is the economy of scale factor. This formula first computes the number of adult equivalent members of a household, $(A + c K)$, and then raises that number to the F power to reflect the economies of scale in consumption in the household. To derive thresholds for families other than the reference family of two adults and two children, the Panel recommends using this formula in conjunction with the threshold for the reference family, $T_R(A=2,K=2)$, in the following manner :

$$T(A,K) = \frac{S(A,K)}{S(A=2,K=2)} \times T_R(A=2,K=2)$$

To implement this recommendation, values for c and F are required. Since we would believe that the consumption needs of a child would be less than an adult, the value of c would be expected to be less than one.

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Similarly, since we would expect the needs of two adults to be less than twice the needs of one adult, the value of F should also be less than one.

But what exact values should be used? To provide some empirical justification for their choice, the Panel inquired which values of c and F would best fit our empirical knowledge from the cost of children literature. Using the estimates of the cost of child-rearing from Betson (1990), the Panel found that a value of .70 for c and .762 for F provided the best fit of the data. While this evidence was grounded in empirical work, the Panel did not feel comfortable recommending a single set of parameters given the inherent uncertainty of this enterprise. To reflect this uncertainty, the Panel decided to provide a range for the parameter whose choice would have the greatest impact on the entire range of scales. This parameter was the economies of scale factor, F. In their report, the Panel recommended that .70 would be a reasonable value to use for c and that a value for F in the range between .65 and .75 would be a reasonable choice.

To begin comparing the impact of alternative choices for F, we will compare the thresholds computed under alternative choices of F with their current poverty thresholds. In the table below, we present alternative thresholds for single and two adult elderly units where the threshold for the reference family unit remains at its 1992 value of \$14,228 (for two adults and two children).

Poverty Thresholds for Elderly One and Two Adult (1992)			
	(1) Single Individual	(2) Two Adults	(2) / (1)
Current Thresholds (1992)	\$6,729	\$8,480	1.26
F = .75, p = .70	\$5,682	\$9,556	1.68
F = .70, p = .70	\$6,041	\$9,814	1.62
F = .65, p = .70	\$6,422	\$10,077	1.57
F = .50, p = 1.0	\$7,114	\$10,061	1.41

The poverty thresholds for single individuals would fall compared to the current thresholds while the thresholds for two adults would rise under the Panel's recommended formula for the equivalence scales. The lower bound value for F of .65 creates the smallest difference between the current thresholds for the single individual but the largest difference for the two adult unit. Conversely the upper bound value of .75 creates the largest difference for the single individual and the smallest difference for the two adult unit.

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An often suggested alternative to the Panel's recommendations is to use the square root of the number of family members to generate equivalence scales (see Ruggles (1990)). In this formulation, the value of F would be .50 while children would be counted as adults (c would equal 1.0). Proponents of this view state that counting children as adults does not mean that they believe that the needs of children are equivalent to that of adults but that child and adults should count equally in poverty measurement. It is interesting to note that counting children as adults and using .50 for a value of F produces thresholds for the elderly which exceed their current poverty thresholds when the modal family unit of two adults and two children is left unchanged.

Given these comparisons, we should expect that not only would the number of poor elderly be affected by the choice of equivalence scale but also the composition of the poor who are elderly. The following estimates of poverty rates represent only the marginal change of alternative equivalence scales in 1992.

	Poverty Rates for :		
	Total Population	Children	Elderly
Current Thresholds (1992)	14.5	21.9	12.9
F = .75, p = .70	13.8	21.4	11.1
F = .70, p = .70	14.2	21.4	12.6
F = .65, p = .70	14.5	21.4	14.0
F = .50, p = 1.0	14.9	21.6	15.5

What is interesting if not surprising is how invariant the overall poverty rate of children is to alternative specifications of the equivalence scale. Additionally, there was no reason to predict it before making these calculations but all the alternative scale specifications would lower the poverty rate of children. On the other hand, the poverty rate of the elderly is quite sensitive to the choice of scales. Alternative choices of the scale could lead to as much as a 14 percent decline in the poverty rate of the elderly or a 20 percent increase.

Given that we are never going to know which scale is "right", how do we choose? When the Panel confronted this question, they attempted to base their recommendation upon as much "scientific" evidence as possible. Using this criterion, the Panel was not favorably disposed toward the "square root of family size" scales. It could not recommend a scale where children's economic needs were equated with adults. Consistent with this criterion, the

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Panel could have recommended a scale formula entirely based upon their reading of the literature. Roughly speaking, this was how the upper bound of the scale parameters, $c = .70$ and $F = .75$, was derived.

However to do so, the Panel would have based its recommendation entirely upon the cost of children literature which does not contain any empirical evidence on the economies of scale of consumption between one and two adults. Knowledge of the scales for these groups is extremely crucial for comparisons of the elderly with the rest of the population. To reflect this lack of knowledge and hence uncertainty, the Panel chose to suggest a lower bound which produced thresholds for the elderly more similar to the current thresholds, especially for the single elderly individual. These considerations led to choosing .65 as a lower bound for our range of the economies of scale.

Providing a bound for the scale parameter was the Panel's method to signal the inherent uncertainty of the specification of the equivalence scales. However, the midpoint of the range, .70, does represent a reasonable choice. The marginal impact of adopting this set of scales slightly lowers the overall poverty rate of all groups but keeps the composition of the poverty population by age unchanged. That is, the relative gap in poverty rates between children and the elderly remains at 70 percent, the same as created using the current poverty thresholds.

Conventional Wisdom?

It should be clear that revisions in the poverty definition will lead to a narrowing of the gap between the poverty rate of children and of the elderly. But will the gap be eliminated? To answer that question, I have constructed a series of alternative poverty definitions and computed their impact on poverty rates using the NAS Panel's 1992 data with the revised MOOP imputations. The two sets of alternative poverty definitions that I will consider are where only the Panel's recommendations on resource redefinition are adopted and a second set where the entirety of the Panel's recommendations to both the definition of the household's resources and threshold are made. The results of these alternatives are presented in the table below.

Impact of Alternative Poverty Definitions on Poverty Rates			
Revised NAS Panel Data (1992)			
	Total Population	Poverty Rate of :	
		Children	Elderly
(1) : Census Money Income (Official)	14.5%	21.9%	12.9%
Resource Recommendations Only :			
(2) : (1) and Add In-Kind Benefits	12.9	19.2	11.0
(3) : (2) and Subtract Taxes (1992 EITC)	13.2	19.2	11.1
(4) : (3) and Subtract MOOP	16.3	22.0	20.3
(5) : (4) and Subtract Work Related and Child Care Expenses	18.3	25.2	20.5
(6) : (5) and Reduce Thresholds by 11.8%	14.5	20.0	16.6
Combined Resource and Threshold Recommendations:			
\$14,800 Threshold and F = .75	18.6	25.9	20.6
\$14,800 Threshold and F = .70	19.0	25.8	22.2
\$14,800 Threshold and F = .65	19.4	25.8	24.0
Equal Rate Threshold and F = .75	14.5	20.5	16.2
Equal Rate Threshold and F = .70	14.5	20.0	16.9
Equal Rate Threshold and F = .65	14.5	19.4	17.7

While the Panel's recommendations spanned both the threshold and resource side of the definition of poverty, at this time there appears to be more acceptance for the set of the Panel's recommendations which modify the resource side of the poverty definition. There is wide acceptance to subtract taxes paid and to count tax credits such as the EITC as well as in-kind benefits which provide food and shelter to households. The subtractions of out-of-pocket expenditures for medical, work related and child care expenses have gained acceptance as a reasonable modification to

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be made to the resources of a household, but there are still some with reservations about these recommendations especially with regards to the subtraction of MOOP.

There is more reluctance to make modifications to the poverty thresholds. While it is difficult to articulate the reasons for this reluctance, the major reasons are potentially twofold. First, the poverty thresholds are currently used in many different governmental programs. While it would be conceivable to continue the current set of thresholds for programmatic purposes and adopt a second set of thresholds for statistical purposes, it is difficult to believe that it would be politically possible to continue the practice for a long period especially if the two sets began to widely differ. A second factor, which I think is more likely, is that officials realize that the setting of the line is inherently an arbitrary task. To undertake revisions in the poverty thresholds without a compelling "scientific" justification is not a wise path to follow in today's political climate. While the NAS Panel recommends a procedure to use in drawing and updating poverty thresholds, there does not appear to be a sufficient consensus within the academic or policy community to adopt it. As we have seen, the choice of equivalence scale has an important impact on the number of elderly who would be considered poor, but we have no empirical basis to judge which set is most appropriate although the Panel does believe that the recommended scale is preferable to the current implicit scale. Finally, the rationale for geographic cost-of-living adjustments to the poverty threshold is strong yet the potential political "fall out" from adopting such adjustments may prove too great to consider.

Against this backdrop, the first set of alternative definitions implement only the Panel's recommendations to the resource side: addition of in-kind food and shelter benefits; subtraction of taxes; subtraction of MOOP; and subtraction of work related and child care expenditures from the household's resource measure. The modifications to the resource base are presented incrementally to show the cumulative effect of each recommendation. All results pertain to 1992. Note that the program parameters for the EITC are for 1992 and not for 1996 as in the previous section of the paper.

The addition of in-kind benefits and subtraction of taxes reduces the poverty rates for both groups in roughly the same proportion thus leaving the relative gap unchanged. This result differs slightly from the estimates presented earlier in the paper where the gap was shown to narrow. In the current estimates, the generous 1996 EITC is not being imputed to low wage workers. If this larger EITC was imputed, then the poverty rate for children would be significantly lower and the relative poverty gap between children and the elderly would also be reduced.

In addition to these widely agreed upon changes to the measure of the household's resources, the Panel recommended that the household's available resources be reduced by the amount of its medical out-of-pocket spending. The rationale for this proposal begins with the Panel's concept of the poverty threshold which was chosen to reflect a normative level of household spending on food, shelter, and clothing plus a little bit more for non-work, non-medical needs. To be consistent with this poverty concept, MOOP as well as other work related expenses need to be subtracted from the household's resources.

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Critics suggest that this approach to the treatment of a household's medical expenditures and needs is clearly inappropriate. Households can spend their way into poverty by over consuming medical services and hence the number of poor will be overstated. It is true that in making its recommendation that the Panel has implicitly assumed that MOOP is entirely nondiscretionary, that is, reflecting the "true" medical needs of the household. However, the critics base their reservations on the Panel's recommendation using the extreme opposite assumption that MOOP is entirely discretionary. They charge that subtracting MOOP is tantamount to allowing the household to subtract its spending on vacations. Clearly both extreme positions are incorrect. Deciding how to divide MOOP spending into what is needed by the household and what is not is a difficult if not an impossible task because a household's medical needs are difficult to ascertain. For example, does all cosmetic surgery represent discretionary spending? If an individual is involved in an auto accident, should the cosmetic surgery done to correct the facial injuries be considered discretionary? Are only procedures done in life threatening situations to be considered needed? But is all spending done in such situations truly needed? What about preventative care? Is the wheelchair purchased by a disabled individual needed or would have crutches been just as good? The point that I am trying to make is that I would imagine that each of us will respond differently to each of these situations. It was the Panel's position that the individual was the best judge of what is medically needed and what is not. Additionally, the Panel felt that medical needs -- unlike food, clothing and shelter requirements -- are highly variable in the population and could not accurately be captured by any addition made to the threshold concept. It was better to develop a poverty measure that would attempt to consistently treat nonmedical poverty separate from health care risks.

The incremental effect of subtracting MOOP on the poverty rate of children is 2.8 percentage points, exactly the same effect which was previously estimated. For the elderly, the incremental impact is 9.2 points. But since these incremental impacts are added to a higher poverty rate for children, the relative poverty gap is narrowed but not eliminated as previously reported.

The final recommendation for the modification of the resource definition was the subtraction of work related and child care expenses. The Panel recommended these exclusions from the measure of the household's resources because these expenditures represented a cost of earning its income which is not included in the threshold concept. Based upon an analysis of the SIPP data, the Panel recommended that a maximum amount of \$14.42 per week worked be deducted from each adult's earnings. Work related child care expenses would also be deducted up to a maximum of \$2,400 for one child and \$4,800 for two or more children. In the case of single parent families, the maximum deduction for these expenses would be the earnings of the head of the family. In the case of two parent families, the primary earner would have deducted only the flat weekly expenses from their earnings while the secondary earner would have deducted the sum of the flat weekly expense plus child care up to the maximum of their earnings.

The incremental effect of this subtraction is small for the elderly population, an increase of .2 points, while significantly larger for children, an increase of 2.2 points. This differential impact on poverty rates widens the relative poverty gap between children and elderly so that when all the changes to the resource side are adopted,

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children's poverty rates are 25 percent higher than the elderly. Compared to the current child-elderly poverty gap of 70 percent, the gap has been narrowed.

While we have focused upon the relative gap in poverty rates between children and the elderly, it is equally important to note that the poverty rate for the elderly has increased by 7.6 percentage points or 59 percent. Much of this increase could be attributed to the fact that in the population, poverty rates would rise. To hold the overall poverty constant, I estimated the impact of adopting all the resource recommendations and reducing all thresholds by 11.8%. While the number of poor remains constant at 36.9 million, the revised poor population would have 1.1 million more elderly individuals and roughly 1.1 million fewer children.

The next set of poverty definitions adopts the entirety of the Panel's recommendations for the threshold as well resource definition. As was noted earlier in the paper, the Panel did not propose specific values for the threshold for the reference family nor for the parameters for the equivalence scale formula but ranges for their choice. In the above table, I have present six alternative combinations for the choices of thresholds and equivalence scale choice. The first three alternatives utilize the midpoint of the Panel's suggested range for the threshold while the next three set the threshold so that the poverty rate for the total population remains the same as the current definition of poverty. For each threshold value, I report three alternative specification of the equivalence scale, for the upper and lower bound values of economies of scale factor as well as the midpoint of the range. (Recall that adopting the Panel's recommended scale formula with the midpoint value of the economies of scale factor creates a poverty population whose age composition is roughly equal to the age composition in the current poverty population.)

Comparing the results which use the \$14,800 threshold for the family of four with the results which modify only the resource definition (specification 5), we see that the incremental impact of adopting the Panel's threshold recommendations will raise the poverty rates for the total population as well as for both demographic groups. While the incremental effect of the Panel's threshold recommendations on children's poverty rate is relatively small compared to the impact of resource redefinition, it is also invariant to choice of economies of scale factor employed. However, the same can not be said for the incremental impact of the threshold recommendations on the elderly population. While the effects are also small compared to the net impact of the resource recommendations, the incremental impact of the recommendations on the poverty rate of the elderly range from .1 to 3.5 percentage points depending upon the economies of scale selected. The relative poverty gap between children and the elderly narrows except for when a value of the economies of scale factor of .75 is utilized. For a value of the economies of scale factor of .70, the gap is reduced to 16 percent. For a value of .65, the gap continues to shrink to a gap of only 7.5 percent compared to the current gap of 70 percent.

Again, some might think that this shrinking poverty gap between children and the elderly is more due to increases in the number of individuals being classified as poor. But the next three poverty definitions, which hold constant the number of poor, display much the same pattern of a shrinking relative poverty gap between children and

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the elderly. As the economies of scale factor varies from .75 to .65, the relative gap ranges from 27 to 10 percent which still represents a considerable reduction in relative poverty between these two groups.

This analysis demonstrates that the incidence of poverty of the elderly is significantly underestimated by current poverty definitions. But are there other groups whose poverty is masked by the methods we currently use? Up to this point, we have focused upon differences between children and elderly. In the remainder of the paper, we will restrict the analysis to the non-aged population. The following tables examine for this population, the composition of total non-aged population, the non-aged poor under current poverty methodology, the non-aged poor under the Panel's recommendations, the portion of the current non-aged poor who are reclassified as no longer being poor, and the portion of the population who are the "new" poor. The first table utilizes the \$14,800 threshold and the second adopts the equal rate scenario. Both tables adopt the value of .70 as the economies of scale factor.

Composition of Nonaged Poverty Populations					
\$14,800 Threshold, Scale Factor of .70					
	Composition of :				
	Total Nonaged Population	Current Poverty Population	New Poverty Population	Persons Moved Out of Poverty	Persons Moved Into Poverty
Children	30.0%	44.4%	41.8%	45.3%	34.9%
Single Individuals	12.0%	16.7%	13.6%	22.2%	6.9%
Childless Adults Units	21.4%	5.0%	8.1%	.8%	15.4%
Units with Children :					
Two Parent	47.5%	30.7%	37.0%	24.6%	52.2%
One Parent	18.2%	44.7%	38.6%	50.5%	23.9%
Weeks Worked :					
0	11.3%	44.8%	35.2%	48.2%	10.7%
1 to 26	5.5%	18.0%	14.8%	18.0%	6.2%
27 to 47	8.6%	12.1%	12.4%	10.0%	12.8%
48 and more	74.6%	25.1%	37.6%	23.8%	70.3%
Received AFDC or SSI	10.1%	42.4%	31.0%	67.4%	7.3%
Received Food Stamps	11.4%	53.7%	40.1%	81.2%	11.0%
Received Housing Subsidy	4.1%	18.8%	12.7%	46.1%	3.2%
No HC Insurance	15.3%	33.3%	36.6%	14.1%	40.4%
White	82.8%	68.3%	69.3%	65.2%	78.6%
Black	13.1%	29.4%	25.6%	31.7%	15.9%
Hispanic	9.6%	19.5%	21.2%	12.0%	23.8%
Number of Persons (millions)	223.1	32.9	41.3	2.9	11.3

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**Composition of Nonaged Poverty Populations
Equal Rate Threshold, Scale Factor of .70**

Composition of :

	Total NonAged Population	Current Poverty Population	New Poverty Population	Persons Moved Out of Poverty	Persons Moved Into Poverty
Children	30.0%	44.4%	42.1%	47.0%	33.7%
Single Individuals	12.0%	16.7%	14.7%	17.4%	5.4%
Childless Adults Units	21.4%	5.0%	7.9%	1.4%	18.4%
Units with Children :					
Two Parent	47.5%	30.7%	33.8%	30.6%	49.6%
One Parent	18.2%	44.7%	40.6%	48.7%	24.8%
Weeks Worked :					
0	11.3%	44.8%	39.3%	45.3%	12.3%
1 to 26	5.5%	18.0%	16.0%	18.3%	6.3%
27 to 47	8.6%	12.1%	12.2%	12.1%	13.0%
48 and more	74.6%	25.1%	32.5%	24.2%	68.5%
Received AFDC or SSI	10.1%	42.4%	32.2%	63.1%	6.5%
Received Food Stamps	11.4%	53.7%	41.6%	77.2%	9.1%
Received Housing Subsidy	4.1%	18.8%	12.2%	38.3%	2.9%
No HC Insurance	15.3%	33.3%	38.5%	16.6%	44.3%
White	82.8%	68.3%	65.8%	65.0%	80.5%
Black	13.1%	29.4%	26.5%	30.7%	13.6%
Hispanic	9.6%	19.5%	22.1%	13.0%	27.0%
Number of Persons (millions)	223.1	32.9	31.7	6.5	5.3

As was noted before, the use of the \$14,800 threshold increases the poverty rate of the total population as well as the rate for children. However, as the table indicates children will be a smaller proportion of the non-aged poor population. They will be more likely to live in households where both parents reside and where the primary earner in the household is more likely to work full year (48 or more weeks). The households who are defined as poor under this definition are less likely to receive cash and in-kind benefits but more likely not to have health care insurance. This poor population's racial mix is more white, but blacks are still predicted to experience a higher rate of poverty than whites. The ethnicity of this population is more Hispanic.

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On net, there are 8.3 million more non-aged persons counted as poor under this definition than under the current definition. But this figure conceals the extent that persons are being reclassified. Nine percent of the currently defined poor population are being reclassified as not poor while 27% of the Panel's poor population are "new" faces in the poverty. These two groups are quite different in their composition. While those who are moved out of poverty are more likely to be single parent families, those who are moved into poverty are more likely to be in two parent families, even more than likely in the total population. Work patterns differ significantly. While those who are moved out of poverty are even more likely than the current poverty population not to work, 70% of those who are moved into poverty by the new definition are working full year. Those who are moved into poverty are even less likely than the general population to receive either cash or in-kind benefits from government.

When the total number of poor in the population is kept the same, the number of non-aged poor declines by 1.2 million which is consistent with our earlier finding that net effect of the Panel's recommendations will be to increase the proportion of the poor who are elderly. While 1.8 million children are moved into poverty as result of the Panel's recommendations, 3.1 million children who are currently classified as poor are moved out of poverty. This results in net reduction of 1.3 million children living in poverty. However, the picture of non-aged poverty population that emerges is very similar to what was described in the Panel's report, although in most cases, the differences are less dramatic.

Conclusions

In this paper, we have reexamined the consequences of the NAS Panel's recommendation after correcting for some recently discovered shortcomings in the Panel's imputation of medical out-of-pocket expenditures. The net result of using these new imputations is that there is a large increase in the poverty rate of the elderly. While the previous estimates showed that the poverty rate of the elderly did not significantly change under the Panel's recommendations, we now predict that their poverty rate will rise and approach the rate of children.

Before concluding that the conventional wisdom about the relative poverty of children and the elderly has been revised, we should note that the NAS Panel saw merit in adding a value for imputed rent to homeowners. The addition of imputed rent would reduce poverty rates for all groups where homeownership exists. Data from the 1991 American Housing Survey indicate that 39 percent of low income households own their own home but that if the household is headed by an individual 65 years old or older, the rate increases to 61 percent. Given that the low income elderly have an above average rate of homeownership, we would expect the addition of any imputed rent to have a greater impact on the poverty rate of the elderly and to widen the relative gap between children and the elderly. The NAS Panel did not recommend considering the value of homeownership at this time because of the practical difficulties of implementing such a measure on either the CPS or SIPP data bases.

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The impact of the revised MOOP imputations on other Panel findings was found to be small. We still find that if the Panel's recommendations were adopted, the poverty population in 1992 would be more likely to work full year, children would more likely live in families where both parents are present, and the poor would be less likely to be receiving cash or in-kind benefits from the government, but more likely not to have health care insurance. We find that these results confirm the Panel's conclusion that its recommendations would not only restore internal consistency to our nation's poverty measure but also shine light on who is truly poor in the U.S. Moreover, as policies change in future years, the Panel's measure will show the effects -- positive or negative -- on the extent and composition of the nation's poor.

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