University of Wisconsin-Madison

Institute for Research on Poverty

Discussion Papers

Sheldon Danziger
Peter Gottschalk

THE MEASUREMENT OF POVERTY: IMPLICATIONS FOR ANTIPOVERTY POLICY

DP #709-82

The Measurement of Poverty: Implications for Antipoverty Policy

Sheldon Danziger
Institute for Research on Poverty
and School of Social Work
University of Wisconsin-Madison

Peter Gottschalk
Department of Economics
Bowdoin College and
Institute for Research on Poverty
University of Wisconsin-Madison

August 1982

This paper was originally prepared for the U.S. House of Representatives, Subcommittee on Census and Population, Hearings on Census Bureau Technical Paper #50: Alternative Methods for Valuing In-Kind Transfer Benefits and Measuring their Effects on Poverty.

The research reported here was supported in part by funds granted to the Institute for Research on Poverty by the Department of Health and Human Services pursuant to the provisions of the Economic Opportunity Act of 1964 and by funds provided by the Graduate School Research Committee of the University of Wisconsin-Madison. The authors thank Robert Lampman, Robert Plotnick, Timothy Smeeding, and Eugene Smolensky for comments on an earlier version, and Susan Marble for research assistance.

ABSTRACT

The Census Bureau released a report in April 1982 showing that if in-kind income from government programs--food stamps, subsidized school lunches, Public Housing, Medicare and Medicaid--is valued and added to money incomes, then poverty in 1979 was substantially less than the 11.1 percent of persons the Census had previously reported. This paper assesses the implications of that report for the measurement of poverty and for transfer policy. Then some evidence on the present level and recent trend in poverty is presented. This is followed by a discussion of how current antipoverty policy differs from that of the past fifteen years. Finally, some projections of poverty into the mid-1980s are offered.

The Measurement of Poverty: Implications for Antipoverty Policy

INTRODUCTION AND SUMMARY

The Bureau of the Census (1982) has released a report showing that if in-kind income from government programs--food stamps, subsidized school lunches, public housing, Medicare and Medicaid--is valued and added to money incomes, then poverty in 1979 was substantially less than the 11.1 percent of persons the Census had previously reported.[1] The resulting estimates of the percentage of persons who are poor range from 6.4 to 9.8 percent, depending on which of the transfer benefits are included and how they are valued.[2]

Many analysts concerned about the well-being of the poor have criticized the report, viewing it as an attempt to demonstrate that poverty is no longer a serious problem. Such skepticism is unwarranted for several reasons. First, it has long been recognized that programs like food stamps and subsidized housing increase the purchasing power of the poor even if they do not alter their cash incomes, and hence, the Census Bureau's official poverty statistics. Similar estimates for earlier years have been widely cited in the academic literature (Smeeding, 1975; Hoagland, 1982).[3] Thus, the Census Bureau has merely responded to academic and Congressional criticism of the official statistics.

Second, rationales for reducing social welfare expenditures are seriously challenged by the findings. The report's lowest estimate of poverty is derived by valuing all of the in-kind transfers listed above at their market cost and adding them to reported cash incomes. That 13.6 million people, 6.4 percent of the population, remain poor refutes the claim that poverty is no longer a serious problem.[4] Moreover, the lowest estimates reported for 1979 for blacks, persons of Spanish origin, and female heads of households are above the poverty levels for whites in the late 1960s.

Third, because the report shows that food stamps, public housing, Medicare and Medicaid do reduce poverty, the frequent criticism that poverty programs benefit social workers, academics, providers and not the poor can be rejected. Just as adding the values of these transfers reduces measured poverty, reducing benefits and terminating eligibility will increase poverty.

Finally, the Census report does not invalidate a basic finding that no matter how measured, poverty declined little between 1973 and 1978 and has sharply increased since that time. As we show below, if cash and in-kind transfers had not increased rapidly since 1965, poverty would not have declined. And, if transfers continue to be cut back without being replaced by other antipoverty policies, poverty will continue to rise through the mid-1980s.

The remainder of this paper is organized as follows. First, several issues related to the measurement of poverty are reviewed. Then some evidence on the present level and recent trend in poverty is presented. This is followed by a discussion of how current antipoverty policy differs from that of the past fifteen years. Finally, some projections of poverty into the mid-1980s are offered.

THE MEASUREMENT OF POVERTY

The federal government's official measure of poverty provides a set of income cutoffs adjusted for household size, the age of the head of the household, and the number of children under age 18 (until 1981, sex of the head and farm-nonfarm residence were other distinctions). The cutoffs provide an absolute measure of poverty which specifies in dollar terms minimally decent levels of consumption. The official income concept, current money income received during the calendar year, is defined as the sum of money wages and salaries, net income from self-employment, Social Security income and cash transfers from other government programs, property income (e.g., interest, dividends, net rental income), and other forms of cash income (e.g., private pensions, alimony). Current money income does not include capital gains, imputed rents, government or private benefits in-kind (e.g., food stamps, Medicare benefits, employer-provided health insurance) nor does it subtract taxes, although all of these affect a household's level of consumption.

The official poverty cutoffs are updated yearly by an amount corresponding to the the change in the Consumer Price Index so that they represent the same purchasing power each year. According to this absolute standard, poverty will be eliminated when the incomes of all households exceed the poverty lines, regardless of what is happening to average household income.

There have been numerous discussions over the past fifteen years as to whether the offical poverty thresholds and income concept are relevant to policy choices (U.S. Department of Health, Education, and Welfare, 1976). Despite these controversies, the adoption of an official measure of poverty, and its use as a social indicator, became a symbol of this country's commitment to raising the standard of living of the poorest citizens. According to James Tobin (1969: p. 83):

> Adoption of a specific quantitative measure, however arbitrary and debatable, will have durable and far-reaching political consequences. Administrations will be judged by their success or failure in reducing the officially measured prevalence of poverty. So long as any family is found below the official poverty line, no politician will be able to claim victory in the war on poverty or ignore the repeated solemn acknowledgements of society's obligation to its poorer members.

Income poverty is a complex concept, and different types of poverty thresholds and income concepts are appropriate for different purposes. An absolute perspective, such as the official measure, focuses on those with incomes that fall short of a minimum (fixed) level of economic resources. On the other hand, relative indicators emphasize not only the household's own level of resources, but how its position compares to that of others. A relative definition draws attention to the degree of inequality at the lower end of the income distribution. Those whose incomes fall well below the prevailing average in their society are regarded as poor, no matter what their absolute incomes may be. A relative poverty threshold, therefore, changes at about the same rate as average income. One common proposal defines the poor as those with less than half of the median income.

The Census report addresses only the issue of augmenting the official income concept, not the issue of changing the current poverty thresholds. However, just as the valuation of in-kind transfers reduces measured poverty, the shift to a relative poverty threshold during a period of rising real incomes or an updating of the official thresholds would increase measured poverty.[5]

A matrix of poverty measures showing two income concepts and two types of poverty thresholds is presented in Figure 1.

Figure 1

A Matrix of Poverty Measures

Type of Poverty Threshold	Income Concept: Pretransfer Income	Income Concept: Posttransfer-Posttax Income
Absolute	I	II
Relative	III	IV

The official income concept lies somewhere between pretransfer income and posttransfer-posttax income on the first row. Census money income does not distinguish between income derived from market and private transfer sources (e.g., wages, dividends, alimony) and income derived from government sources (e.g., Social Security, Public Assistance income). As such, it fails to separate the private economy's antipoverty performance from the performance of government cash transfer programs. Households that do not receive enough money income from private sources to raise them over the poverty lines constitute the pretransfer poor (a more exact title would be pregovernment transfer poor). Pretransfer poverty has received virtually no attention in government reports. Yet it reveals the magnitude of the problem faced by the public sector after the market economy and private transfer system (e.g., private pensions, interfamily transfers) have distributed their rewards. This information is essential for analyzing the "trickle-down" effects of economic growth.

The valuation of in-kind transfers does move the Census closer to the concept of posttransfer-posttax income. This preferred measure would have been the result if, in addition to adding in-kind government transfers received by the poor, the report had also added in-kind private transfers (e.g., fringe benefits) and subtracted direct taxes paid. Nonetheless, recent studies suggest that the new report's results would not be significantly affected by these adjustments (Smeeding, 1981; Hoagland, 1982).

By providing a set of in-kind adjustments, the Census allows the reader to choose his/her preferred method of valuation and what transfers to include. We prefer that all in-kind transfers other than medical expenditures be added at their recipient (cash equivalent) values and that the poverty budget share approach be used for medical expenditures, because the data required for estimating their recipient values are not available. Nonetheless, in what follows, we adopt the market cost approach for all in-kind transfers because, by using these lowest estimates of poverty, we reinforce our conclusions about the failure of poverty to have declined since the early 1970s.

THE LEVEL AND TREND OF POVERTY

The new report shows that for 1979, 11.1 percent of persons were officially poor, and 6.4 percent were poor if in-kind transfers were valued at their market cost. Our estimate for pretransfer poverty for 1979 is about 21 percent of all persons. Transfers, therefore, had a large impact in reducing poverty. The exact magnitude cannot be determined without an estimate of how much transfer recipients reduced their work effort in response to transfers.[6] The data on pretransfer poverty reported here assume that there was no labor supply response. Thus, as an upper bound estimate, cash transfers removed 8.9 percent of persons from poverty (21.0-11.1) and in-kind transfers removed another 4.7 percent (11.1-6.4).

Despite the antipoverty effectiveness of income transfers, the war on poverty has not been won. Robert Lampman (1971: p. 53) has written that:

> ...the elimination of income poverty is usefully thought of as a one-time operation in pursuit of a goal unique to this generation. That goal should be achieved before 1980, at which time the next generation will have set new economic and social goals, perhaps including a new distributional goal for themselves.

The Census report shows that we have yet to reach this original antipoverty goal.

The data for all persons mask large differences in poverty across persons living in various types of households. Table 1 shows the substantial differences in both the official measure of poverty and the measure that values in-kind transfers at market costs for persons living in households where the head is white, black, of Spanish origin, or elderly. The data in column 2, the lowest poverty rates in the Census report, reveal that poverty rates for blacks, persons of Spanish origin, and female household heads remain above the levels that existed for whites in the late 1960s (11.3 percent in 1966). The third column shows the upper bound estimate (assuming no labor supply response) of the antipoverty effectiveness of in-kind transfers. The lower is the ratio of the

Table 1

Comparison of Incidence of Poverty, Official Measure and Money Income Plus the Market Value of Food, Housing, and Medical Benefits, 1979

Persons Living in Households Where Head Is:	(1) Official Measure Money Income	(2) Money Income Plus In-Kind Transfers at Market Value	(3) Ratio: Column (2)/Column (1)
All Persons	11.1%	6.4%	.58
White	8.5	5.2	.61
Black	30.4	15.1	.50
Spanish Origin	21.4	12.0	.56
Female Householder, No Husband Present	34.8	17.6	.51
Elderly (65 and over)	14.7	4.5	.31

Source: U.S. Bureau of the Census. Alternative Methods for Valuing Selected In-Kind Transfer Benefits and Measuring Their Effects on Poverty. Technical Paper #50. (Washington, D.C.: U.S. Government Printing Office, 1982).

measure that values in-kind transfers to the official measure, the higher is the antipoverty effectiveness.[7] In-kind transfers reduce poverty from 39 to 69 percent for the various groups, with the smallest effect for whites and the largest for the elderly. The high levels of poverty that persist for female headed and minority households after the receipt of cash and in-kind transfers reinforce the continuing need for an antipoverty policy.

While Table 1 shows the antipoverty effectiveness of in-kind transfers, the report and the published official data do not reveal the antipoverty effectiveness of cash transfers. Table 2 shows for 1978 the incidence of poverty before and after government cash transfers and the antipoverty effectiveness of these transfers for households where the head is white, black, of Spanish origin, a woman and elderly. Cash transfers substantially reduce poverty for all of the groups. As is the case for in-kind transfers, the largest effect is for the elderly. Much of the difference in antipoverty effectiveness is due to the fact that Social Security and other social insurance transfers are based on past earnings, so that whites and males receive the largest transfers.

Although the large and increasing expenditures on income maintenance programs have been a topic of great concern, less attention has been focused on the gaps in coverage in the present system--the holes in the safety net. In recent years, almost 40 percent of nonaged, poor households received no income transfers, and many of those who did receive transfers did not receive enough to lift their households above the poverty line. Much of the variation in coverage among the poor is due to the different eligibility requirements and benefit levels in programs administered by the states.

Taken together, the data in Tables 1 and 2 refute assertions that current income transfer programs do not aid the poor. However, they do not show the trend in poverty or the change in the antipoverty effectiveness of transfers over the recent past. Three trends are apparent in the data that follow. First, poverty has declined, but the patterns differ by demographic group. Second, the progress achieved was primarily a result of increased transfers. Third, the antipoverty effectiveness of cash transfers increased between 1965 and 1974, but has remained fairly constant since then.

Table 3 shows the official poverty rates for 1966, 1973, and 1981 for all persons and the five demographic groups discussed above. The data show substantial improvement between 1966 and 1973, with the largest percentage decline for the elderly and the smallest for households headed by females. After 1973, however, the overall incidence of poverty increased, so that poverty in 1981 was only slightly lower than it was in 1966. Poverty continued to decline only for the elderly, but the extent of the decline was smaller than in the earlier period.

Table 4 suggests that increased transfers were an important component of the drop in poverty, a result which has been widely discussed in the literature (also, see Gottschalk, 1978; Institute for Research on Poverty, 1982). Column 1 of Table 4 shows the dramatic rise in cash transfers from about 5 percent of GNP in 1965 to a peak of over 9 percent in 1976. This ratio declined after 1976, but increased due to the recession in 1980. Column 4 shows that the antipoverty effec-

Table 2

Comparison of Incidence of Poverty, Pretransfer Income and Official Measure, 1978

Persons Living in Households Where Head Is:	(1) Pretransfer Income	(2) Official Measure (Money Income)	(3) Ratio: Column(2)/Column (1)
All Persons	20.2%	11.4%	.56
White	16.7	7.9	.47
Black	38.1	28.4	.75
Spanish Origin	28.5	22.1	.78
Female Householder, No Husband Present	49.0	32.3	.66
Elderly	56.2	14.0	.25

Source: Computations by authors from March 1979 Current Population Survey computer tapes.

Note: Pretransfer income is defined as census money income less cash transfers from Social Security, Railroad Retirement, Public Assistance (Aid to Families with Dependent Children, Supplemental Security Income, General Assistance), unemployment compensation, workers' compensation, government employee pensions and veterans' pensions and compensation.

Table 3

Incidence of Poverty, By Race, Spanish Origin, Sex and Age of the Household Head, Official Measure, Selected Years, 1966-1981

		Persons Living in Households Where Head Is:				
	All Persons	White	Black	Spanish Origin	Female Householder	Elderly
1966	14.7%	11.3%	41.8%	n.a.	41.0%	28.5%
1973	11.1	8.4	31.4	21.9	34.9	16.3
1981	14.0	11.1	34.2	26.5	35.2	15.3
Percentage Change						
1966-1973	-24.5	-25.7	-24.9	n.a.	-14.9	-42.8
1973-1981	26.1	32.1	8.9	21.0	0.9	-6.1
1966-1981	-4.8	-1.8	-18.2	n.a.	-14.1	-46.3

Source: U.S. Department of Commerce, Bureau of the Census, Money Income and Poverty Status of Families and Persons in the United States: 1981, Current Population Reports, Series P-60, No. 134 (Washington, D.C.: U.S. Government Printing Office, July 1982).

n.a. = not available

Table 4

Trends in Cash Transfers as a Percentage of GNP and Official and Pretransfer Measures of Poverty, Selected Years, 1965-1981

	(1) Cash Transfers (GNP)	Percentage of Persons Poor: (2) Official Measure (Money Income)	(3) Pretransfer Income	(4) Ratio: Column(2)/Column(3)
1965	.053	17.3%	21.3%	.81
1968	.056	12.8	18.2	.70
1970	.063	12.6	18.8	.67
1972	.073	11.9	19.2	.62
1974	.076	11.6	20.3	.57
1976	.091	11.8	21.0	.56
1978	.085	11.4	20.2	.56
1980	.083	13.0	21.9	.59
1981	.086	14.0	n.a.	n.a.

Sources: Column (1): GNP is from The Economic Report of the President. Cash transfers are from the Social Security Bulletin.

Column (2): Table 15, Current Population Reports, Series P-60, No. 134.

Column (3): Danziger and Plotnick (1982), p. 40.

n.a. = not available

tiveness of cash transfers grew as well over this same period. The lower the ratio, the larger is the gap between official and pretransfer poverty, and hence the greater the antipoverty effectiveness. Poverty stopped declining roughly when the proportion of GNP going to transfers levelled off. Pretransfer (column 3) poverty, which is not directly affected by increased transfers, decreased much more slowly than the official measure in the late 1960s and since then has increased to about the level that existed in 1965.

These descriptive statistics cannot sort out the separate impacts of changes in transfers, unemployment rates and economic growth. Nonetheless, the data are consistent with the view that transfers were an essential element in the trend toward lower poverty.

ANTIPOVERTY POLICIES: INCOME TRANSFER PROGRAMS AND ECONOMIC GROWTH

Social policies during the last 15 years reflected the view that public expenditures should be increased to stimulate opportunities for the poor. Many programs that provided billions of dollars of assistance to millions of recipients were enacted into law. These are the very programs that have been targeted for the largest budget reductions--for example, food stamps, the school lunch program, subsidized housing, Aid to Families with Dependent Children, and Medicaid. The current administration's approach is to rely less on transfers and more on economic growth. As a result, public expenditures on behalf of the poor have been decreased, and tax cuts to increase incentives to work and save have been enacted. Robert Lampman has argued that the very declaration of the war on poverty had an almost immediate and lasting effect--it required all existing programs and proposals for policy changes to address the question, "What does it do for the poor?" (Lampman, 1974). The Reagan economic program instead asks, "What does it do for the non-poor?" This new approach assumes that those who remain poor will be better off if they wait for economic growth to trickle down from those above them on the socioeconomic ladder than if they rely on government income transfer programs.

While it is axiomatic that there are more poor in bad times than in good, there is ample reason to doubt the efficacy of trickle-down policies. Until recently it was assumed that economic growth would reduce poverty. However, the evidence from the recent past suggests that economic growth will not raise the earnings of the poor enough to enable many of them to escape poverty without government assistance.

The major factor since 1966 contributing to the reduction in poverty seems to have been the growth in government transfers, which offset increases in poverty resulting from demographic changes and high unemployment rates. Economic growth per se seems to have had little effect. For example, Gottschalk (1982) analyzed a sample of middle-aged married men, who are expected to be aided most by economic growth. He found that the proportion with low earnings rose from 12.6 percent in 1966 to 15.3 percent in 1973, even though economic growth over this period was substantial.

That the direct effects of economic growth on poverty are small should not be surprising, because only about one-third of those who are poor before the receipt of transfers can be expected to work. The remaining two-thirds--the aged, female-headed households with children under six, the disabled--are likely to remain dependent upon transfers (see Table 5). This means that economic growth and expansion of the labor market cannot serve as a panacea for poverty. And, any actions taken to dismantle transfer programs without replacing them with ones that are more effective in combating poverty could wipe out the gains that have been made in reducing poverty.

PROJECTIONS OF POVERTY

In order to assess the probable impacts of shifting from reliance on income transfers to reliance on economic growth, we have attempted to project whether the economic growth that is expected in the next several years is sufficient to reduce poverty at the same time that income transfers are being reduced. Table 6 presents the official Census data on poverty for 1979 through 1981 and our projections for 1982 and 1983. These projections were derived by estimating separate regressions for each of the groups listed in the column headings of the table.[8] The pattern of the coefficients on unemployment and transfers were the same for all seven equations: poverty declines when unemployment falls and when real cash transfers per household rise. The coefficients for GNP per household were significant only for white and Spanish origin men.

The incidence of poverty for all persons and for persons in each of the groups shown is projected on the basis of the estimated coefficients and estimates of prices, Gross National Product, unemployment rates, and cash transfers as reported by the Congressional Budget Office. These projections show an increase in poverty for each group.

Table 5

The Composition of Households with Pretransfer Incomes below the Poverty Line, 1978

Household Head:	Number (millions)	Percentage of the Poor
Aged head (65 years and over)	10.12	48.1%
Female head, with a child under 6 years	1.50	7.1
Students	1.05	5.0
Disabled head	2.50	11.9
Persons working full time full year	1.57	7.5
Single persons working less than full time full year	1.91	9.1
Male head working less than full time full year	1.31	6.2
Female head, no children under 6, working less than full time full year	1.07	5.1
All pretransfer poor households	21.03	100.0

Source: Calculated by authors from the March 1979 Current Population Survey computer tapes.

Note: Classification is mutually exclusive and is hierarchical: Any household who fits in more than one category has been classified only in the one closest to the top of the table.

Table 6

Incidence of Poverty, Actual and Projected Official Measure, 1979-1983

Year	All Persons	Persons Living in Households Headed by: White Males	White Females	Black Males	Black Females	Spanish Origin Males	Spanish Origin Females
1979 Actual	11.7%	5.9%	24.9%	16.2%	52.2%	15.5%	48.9%
1980 Actual	13.2	7.0	27.6	17.8	52.9	18.9	53.5
1981 Actual	14.0	7.6	28.4	19.4	55.8	18.6	54.0
1982 Projected	14.9	8.4	28.0	19.7	54.3	21.1	54.1
1983 Projected	14.8	8.4	29.3	20.1	54.5	21.4	55.7

Source: Actual data from U.S. Department of Commerce, Bureau of the Census. Money Income and Poverty Status of Families and Persons in the United States: 1981, Series P-60, No. 134. Projections are from Danziger and Gottschalk (1982).

Note: Projections are based on regressions estimated for the period 1966 to 1981 (1972 to 1981 for persons of Spanish origin). Our projections include the impact of the 1981 revision in the poverty lines.

Poverty in 1983 for each group other than persons living with white males will be higher than it was for all persons in 1964 (19.0 percent) when the War on Poverty was declared. These results reflect offsetting factors--unemployment is projected to fall and real GNP to rise after 1982, while transfers are projected to fall. Thus, to some extent the poverty-reducing effects of growth are offset by the poverty-increasing effects of the budget cuts, so that poverty in 1983 will be higher than it was in 1980 when the Reagan administration began.

We have also projected a series that includes in-kind transfers even though data inadequacies make these estimates less certain and prevent us from providing projections for the detailed groups. Poverty is projected to rise from 6.4 percent of all persons in 1979 to 8.1 percent in 1983.

This exercise gives us little reason to think that the earnings gains from economic growth that accrue to those at a disadvantage in the labor market are likely to be large enough to significantly reduce poverty. This does not mean that economic growth, which raises average living standards, is undesirable, but rather that growth alone is not a sufficient antipoverty strategy.

The recent growth of income transfer programs has had a significant effect on the trend in poverty. This, and other redistributive effects--protection against income losses due to unemployment, retirement, disability and death; guarantees of access to minimum levels of food, shelter, and medical care--must be balanced against the costs. The growth in transfers has been accompanied by some declines in work effort and savings that may have contributed to sluggish economic performance. But the magnitude of these declines is estimated to be small. Severe cutbacks of the programs will lead to small gains in efficiency but large increases in poverty.[9] However, continued expansion of current transfer programs is likely to produce increasingly small reductions in poverty because it will not aid those among the poor who do not receive any transfers, and it will do little to reduce pretransfer poverty.[10]

The Census report provides important evidence on the antipoverty effectiveness of in-kind transfers. We have shown that increased cash and in-kind transfers were key elements in the reductions in poverty that have occurred in the past 15 years, but that there has been little success in reducing pretransfer poverty. We still do not have a good understanding as to why pretransfer poverty has been so difficult to reduce. However, there is ample reason to believe that transfer programs cannot be cut back without paying the price of higher levels of poverty, however measured.

NOTES

[1]This study was mandated by the U.S. Senate in September 1980.

[2]The report provides data on three income concepts and three methods for valuing in-kind transfers. This yields nine estimates, each of which adds additional amounts of in-kind transfers to the Census Bureau's previously published data on money incomes. The report provides detailed description of the methodology used. The income concepts are money income plus in-kind transfers for food and housing; money income plus food, housing, and medical care, but excluding institutional expenditures; and money income plus food, housing, and all medical care. The measured incidence of poverty falls as the additional benefits are added.

The three methods for valuing the in-kind transfers are the market value approach, the recipient value approach, and the poverty budget share approach. The market value is equal to the purchase price in the market; the recipient value reflects the view that the recipient would prefer a smaller amount of cash that would not restrict his/her consumption of the subsidized good; the poverty budget share value limits the in-kind transfer's value to an amount that equals the proportion of the poverty line typically spent on the good. This requires the estimation of the amount of expenditures for food, housing, and medical care for persons at or near the poverty level. Because the recipient value and the poverty budget share value are always less than or equal to the market value, they yield smaller reductions in the poverty population. The lowest estimate is the one that includes food, housing, and medical care, including institutional expenditures, and values these transfers at their market value.

[3]These studies also attempt to correct for the underreporting of incomes to the Census; an adjustment that further reduces estimates of the poverty population.

[4]These Census figures are substantially higher than the rough estimates provided by Paglin (1980).

[5]For a discussion of the trend in relative poverty, see Danziger and Plotnick (1982). For a discussion of how the official thresholds would change if they were to be recomputed using recent information, see Fendler and Orshansky (1979).

[6]If an individual reduces his/her labor supply when an income transfer is received, then the transfer may induce an increase in pretransfer poverty. The literature does not provide a definitive estimate of the size of this response. Robert Plotnick ("The Redistributive Impact of Cash Transfers, Net of Their Labor Supply Impacts," Public Finance Quarterly, 1983, forthcoming) uses a simulation model to move from the standard comparison of pretransfer income (defined as posttransfer income less transfers) and posttransfer income to one that adjusts pretransfer income for transfer-induced labor supply and earnings effects. He restricts his analysis to household heads between the ages of 18 and 58 and to the six largest cash transfer programs (i.e., social security, public assistance, unemployment insurance, workers' compensation, veterans' pensions and veterans' disability compensation). Using the income and substitution effects estimated from the Seattle-Denver Income Maintenance Experiments, Plotnick finds that in 1974 all cash transfers from these programs, because of their income guarantees and marginal tax rates, induced a 15.4 percent decrease in the earnings of transfer recipients. As a result, his data show that cash transfers reduced

poverty by 18 percent when their effect is measured as in Table 2 of this paper, but by only 8 percent when labor supply responses were included. For female heads of household with children, the conventional approach shows that transfers reduced poverty by 17 percent, while the labor supply adjustments reduce this to 13 percent.

Plotnick's estimate is not directly applicable for our purposes, however. First, in deriving his estimate, he assumes a total elimination of the transfer programs. Such a change would probably have considerably larger labor supply responses than would a marginal change in any program. Second, analyses based on income and substitution effects alone do not explain the increased participation of those already eligible. And over the recent period, participation has increased in many programs where the income guarantees and marginal tax rates have remained fixed. Without a model of the decision to participate, one cannot determine whether the factors that contributed to increasing participation also led to labor supply changes. If factors unrelated to guarantees and tax rates were responsible for increased transfers, then transfers may not have had the labor supply effects attributed to them by Plotnick.

[7]If transfers had no effect on poverty, the numbers in columns 1 and 2 would be the same, and the measure of antipoverty effectiveness in column 3 would be 1.0; if transfers totally eliminated poverty, the ratio would be 0.0.

[8]The dependent variables were the logarithms of the various poverty incidences; the independent variables were the logarithms of the unemployment rate, cash transfers per household, and GNP per household. The regressions were estimated using a maximum likelihood adjustment for

autocorrelation. The coefficients and complete details of our procedure can be found in Danziger and Gottschalk (1982).

[9]The studies on which this conclusion is based are reviewed in Danziger, Haveman, and Plotnick (1981).

[10]For a discussion of alternative antipoverty policies see Danziger, Garfinkel, and Haveman (1979), and Danziger, Haveman and Plotnick (1980).

REFERENCES

Danziger, S., and P. Gottschalk (1982). "Economic Growth, Income Transfers, and Projections of Poverty for the 1980s." University of Wisconsin-Madison: Institute for Research on Poverty, mimeo, October.

Danziger, S., and R. Plotnick (1982). "The War on Income Poverty: Achievements and Failures," pp. 31-52, in P. Sommers (ed.), Welfare Reform in America. Hingham, Mass.: Kluwer Nijhoff.

Danziger, S., R. Haveman, and R. Plotnick (1981). "How Income Transfer Programs Affect Work, Savings, and the Income Distribution: A Critical Review." Journal of Economic Literature, 19, (September): 975-1028.

_____ (1980). "Retrenchment or Reorientation: Options for Income Support Policy." Public Policy, 28, (Fall): 473-490.

Danziger, S., I. Garfinkel, and R. Haveman (1979). "Poverty, Welfare, and Earnings: A New Approach." Challenge (September-October): 28-34.

Fendler, C., and Mollie Orshansky (1979). "Improving the Poverty Definition." Proceedings of the American Statistical Association (December):

Gottschalk, P. (1978). "Earnings, Transfers and Poverty Reductions," pp. 237-272, in R.G. Ehrenberg (ed.), Research in Labor Economics, Vol. 2. Greenwich, Conn.: JAI Press.

Hoagland, G. (1982). "The Effectiveness of Current Transfer Programs in Reducing Poverty," pp. 53-75, in P. Sommers (ed.), Welfare Reform in America. Hingham, Mass.: Kluwer Nijhoff.

_____ (1982). "Earnings Mobility: Permanent Change or Transitory Fluctuations?" Review of Economics and Statistics, in press.

Institute for Research on Poverty (1981-82). "Poverty in the United States: Where Do We Stand?" FOCUS, 5 (Winter): 1-11.

Lampman, R. (1974). "What Does It Do for the Poor? A New Test for National Policy." Public Interest, 34, (Winter): 66-82.

_____ (1971). Ends and Means of Reducing Income Poverty. Chicago: Markham Publishing Company.

Paglin, M. (1980). Poverty and Transfers In-Kind. Stanford, Calif.: Hoover Institution Press.

Plotnick, R. (1983). "The Redistributive Impact of Cash Transfers, Net of Their Labor Supply Impacts." Public Finance Quarterly, forthcoming.

Smeeding, T. (1975). Measuring the Economic Welfare of Low Income Households and the Antipoverty Effectiveness of Cash and Non-cash Transfer Programs. Unpublished Ph.D. thesis, University of Wisconsin-Madison, Department of Economics.

_____ (1981). "The Size Distribution of Wage and Nonwage Compensation." Paper presented to the National Bureau of Economic Research Conference on Income and Wealth, October.

Tobin, J. (1969). "Raising the Incomes of the Poor," pp. 77-116, in K. Gordon (ed.), Agenda for the Nation. Garden City, N.Y.: Doubleday.

U.S. Bureau of the Census (1982). Alternative Methods for Valuing Selected Inkind Transfer Benefits and Measuring Their Effects on Poverty. Technical Paper #50. Washington, D.C.: U.S. Government Printing Office.

U.S. Department of Health, Education, and Welfare (1976). The Measure of Poverty. A Report to Congress. Washington, D.C.: U.S. Government Printing Office.