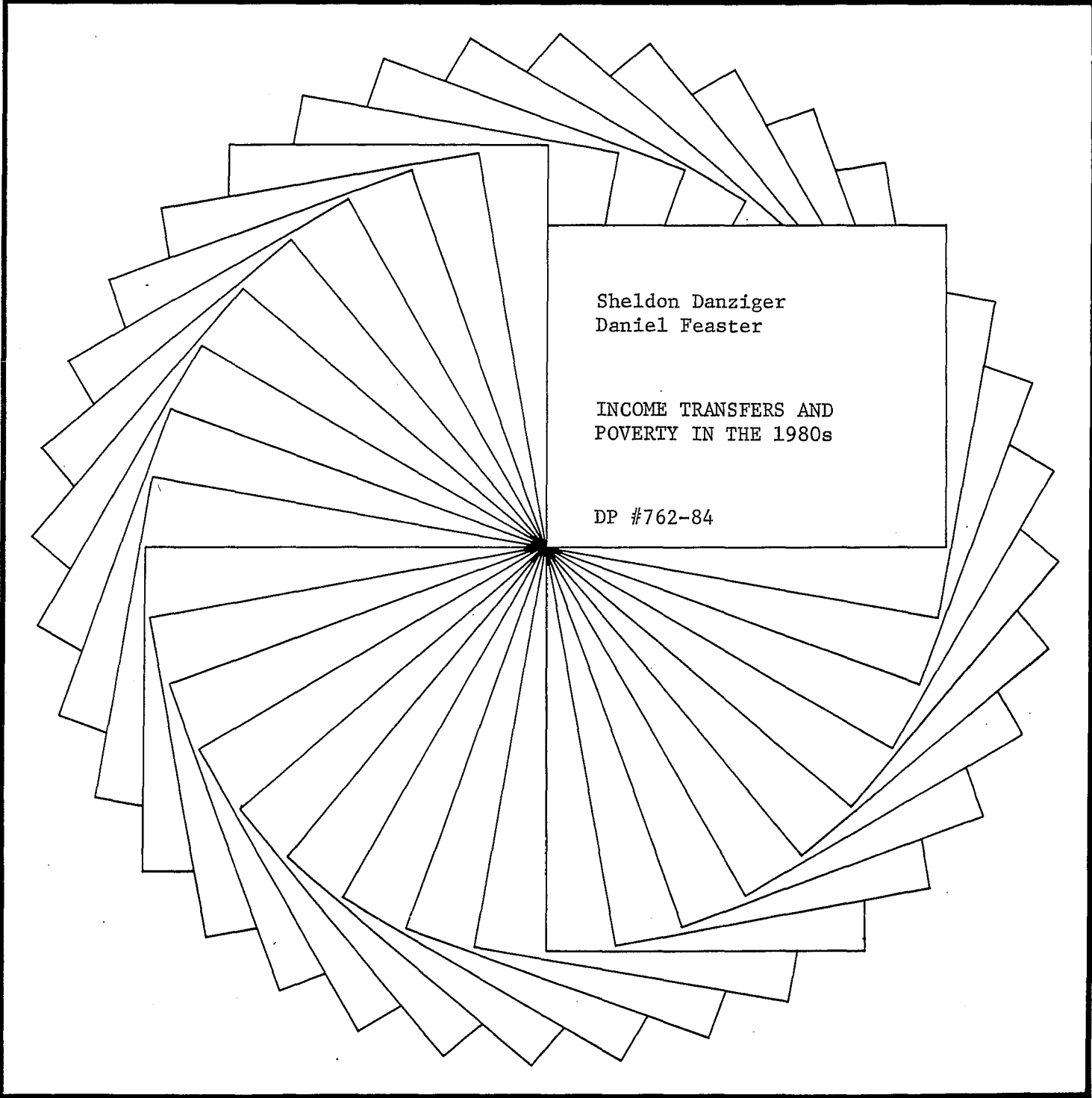# IRP Discussion Papers

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INCOME TRANSFERS AND
POVERTY IN THE 1980s

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Income Transfers and Poverty in the 1980s

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ABSTRACT

This paper examines changes in the extent to which cash income maintenance transfers reduce poverty. First, trends in geographical differences in poverty rates and the antipoverty impact of transfers are described. Then the Reagan administration's policies with respect to social programs are reviewed. Next, demographic differences in poverty rates and transfer receipt are presented for households with children, headed by nonaged men and women. A statistical decomposition shows how much of the recent increase in poverty in these groups is due to changes in the probability of receiving a transfer and in the probability of escaping from poverty given receipt. A two-equation econometric model is used to analyze the determinants of these two probabilites and show how they have changed in recent years. Finally, the prospects for reducing poverty in the mid-1980s are discussed and some suggestions are offered for the reform of antipoverty policy.

Income Transfers and Poverty in the 1980s

INTRODUCTION

The primary intent of the War on Poverty was to promote employment opportunities and higher wages. The poor could then escape poverty in the same manner as the nonpoor—through the private labor market, and not because of government transfer payments. Despite these hopes, income maintenance expenditures grew rapidly. By the mid-1970s, such spending cost about three times as much in real terms as in the mid-1960s, owing to the introduction of new programs and to increases in both the number of beneficiaries and the size of income maintenance payments in existing programs. However, real transfer growth slowed in the late 1970s and then became negative in some programs as a result of the Reagan administration's budget cuts.

This paper examines changes in the extent to which cash income maintenance transfers reduce poverty. We first describe trends in geographical differences in poverty rates and the antipoverty impact of transfers. While metropolitan issues are a focus of this conference, we discuss them only briefly, since transfer policy is primarily determined by the federal government and secondarily by the states. Then we briefly review the Reagan administration's policies with respect to social programs. We return to the data and focus on demographic differences in poverty rates and transfer receipt among households with children which are headed by nonaged men and women. (Aged transfer recipients participate in a very different set of transfer programs, which, by and large, have been little affected by recent legislation.) We present a statistical decomposition

that shows how much of the recent increase in poverty is due to changes in the probability of receiving a transfer and in the probability of escaping poverty given receipt. Then we use a two-equation econometric model to analyze the determinants of these two probabilities and show how they have changed in recent years. Finally, we discuss the prospects for reducing poverty in the mid-1980s and offer some suggestions for reform of antipoverty policy.

MEASURING POVERTY AND THE IMPACT OF TRANSFERS

An analysis of income poverty requires the specification of both a poverty threshold and an income concept. A household is considered "poor" if its income falls below the poverty threshold. Different poverty thresholds and income concepts convey different information about the nature and magnitude of the poverty problem. While there are a variety of alternative thresholds and income concepts (Danziger and Gottschalk, 1983), we focus here on the official poverty threshold and on two income concepts—pretransfer income and Census money (posttransfer) income.

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 that specifies in dollar terms minimally decent levels of consumption. The official Census 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.[1]

The official poverty thresholds are updated yearly by an amount corresponding to the change in the Consumer Price Index so that they represent the same purchasing power each year. For 1982, the poverty lines ranged from $4626 for a single aged person to $19,698 for a household of 9 or more persons. The average poverty threshold for a family of four was $9862. 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.

Census money income does not distinguish between income derived from market and private transfer sources (e.g., wages, dividends, alimony) and that derived from government transfers (e.g, Social Security, public assistance). As such, it fails to separate the private economy's anti poverty 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 pre-government-transfer poor). Pretransfer poverty has received little attention, 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.

The antipoverty effect of transfers is measured in this paper by a comparison of pretransfer and posttransfer poverty. Cash transfers include Social Security, Railroad Retirement, Aid to Families with Dependent Children, Supplemental Security Income, General Assistance, Unemployment Insurance, Workers' Compensation, government employee pensions, and veterans' pensions and compensation.[2] Pretransfer income is defined by subtracting government transfers from posttransfer income. This definition assumes that transfers elicit no behavioral responses which would cause income without transfers to deviate from observed pretransfer income. However, transfers do induce labor supply reductions, so that recipients' net incomes are not increased by the full amount of the transfer. Thus, true pretransfer income is likely to be higher than measured pretransfer income. Pre-post comparisons, therefore, like the ones made here, are likely to provide upper-bound estimates of antipoverty effects.[3]

GEOGRAPHICAL VARIATIONS IN POVERTY

Table 1 shows the incidence of posttransfer poverty for all persons by location of residence for 1967, 1978, and 1982; We use 1967 and 1982 data because they are reported on the earliest and latest available computer tapes from the Census Bureau's annual March Current Population Survey (CPS). We chose 1978 because real cash transfers per household peaked in the late 1970s and because poverty has increased in every year since 1978.[4] Residence is defined for persons living inside or outside

Table 1

Incidence of Poverty (Posttransfer) among Persons, by Residence

| | | Inside Metropolitan Areas | | Outside Metropolitan Areas | Residence Not Identified |
	All Persons	In Central Cities	Outside Central Cities		
Incidence of Poverty					
1967	14.3%	15.1%	7.6%	20.3%	N.A.
1978	11.4	15.5	6.5	13.8	11.1
1982	15.0	20.3	9.2	18.1	13.6
% change, 1967–78	−20.3	+2.6	−14.5	−32.0	N.A.
% change, 1978–82	+31.6	+31.0	+41.5	+31.2	+12.6
% change, 1967–82	+4.9	+34.4	+21.1	−10.8	N.A.
Composition of the Poor					
1967	100.0	31.2	18.7	50.1	N.A.
1978	100.0	36.2	20.9	34.7	8.3
1982	100.0	35.5	22.6	34.2	7.7
Composition of the Population					
1967	100.0	29.5	35.2	35.3	N.A.
1978	100.0	26.5	36.5	28.6	8.4
1982	100.0	26.2	36.9	28.3	8.5

Source: Computations by authors from March 1968, 1979, and 1983 Current Population Survey
data tapes.

N.A. = not available.

of a central city and within a metropolitan area, outside of a metropolitan area, or residence not identified for the latter two years (1978 and 1982). The 1967 classification does not include the last category, which was added to preserve confidentiality after the CPS began to identify each household's state of residence.

Poverty as officially measured declined from 14.3 percent of all persons in 1967 to 11.4 percent in 1978, but increased to 15.0 percent in 1982.[5] During the 1967 to 1978 period, by far the largest decline was for persons living outside of metropolitan areas, who had the highest rates in 1967. Poverty rates were relatively constant inside of metropolitan areas during this period. Since 1978, rates have increased sharply in all locations, so that the 1982 rate is below the 1967 rate only for those living outside of metropolitan areas. Central city residents now have the highest poverty rate and are the largest group among the poor.

The three columns of Table 2 show the pretransfer and posttransfer poverty rates for the United States and for the four Census regions and the percentage reduction in poverty due to cash transfers. In the nation and in each region except the South, pretransfer and posttransfer poverty rates in 1982 were higher than they were in 1967. In the 1967 to 1978 period, poverty rates in the South declined more than those in the other regions; between 1978 and 1982 they rose less quickly. There is now much less variation in poverty rates across regions than there was in 1967. For example, poverty rates in the Northeast, the lowest in both 1967 and 1982, increased from 71 to 87 percent of the U.S. average, while those in the South, the highest in both years, decreased from 155 to 121 percent of the U.S. average.

Table 2

Incidence of Poverty among Persons and the
Antipoverty Impact of Transfers, by Region

	Pretransfer Income (1)	Posttransfer Income (2)	Percentage Reduction in Poverty Due to Cash Transfers[a] (3)
United States			
1967	19.4%	14.3%	26.3%
1978	20.2	11.4	43.6
1982	24.0	15.0	37.5
% change, 1967–78	+ 4.1	−20.3	––
% change, 1978–82	+18.8	+31.6	––
Northeast			
1967	15.1	10.1	33.1
1978	19.7	10.4	47.2
1982	22.5	13.0	42.2
% change, 1967–78	+30.5	−2.9	––
% change, 1978–82	+14.2	+25.0	––
North Central			
1967	16.8	11.6	31.0
1978	17.3	9.1	47.4
1982	22.6	13.4	40.7
% change, 1967–78	+ 3.0	−21.6	––
% change, 1978–82	+30.6	+47.3	––
South			
1967	27.3	22.2	18.7
1978	23.7	14.7	38.0
1982	26.8	18.1	32.5
% change, 1967–78	−13.2	−33.4	––
% change, 1978–82	+13.1	+23.1	––
West			
1967	16.1	10.9	32.3
1978	18.8	10.0	46.8
1982	22.7	14.1	37.9
% change, 1967–78	+16.8	−8.3	––
% change, 1978–82	+20.7	+41.0	––

Source: Computations by authors from March 1968, 1979, and 1983
Current Population Survey data tapes.
[a]Defined as ((Posttransfer − Pretransfer)/Pretransfer) x 100.

The last column of Table 2 shows the growing antipoverty effect of increased transfers over the 1967-1978 period and their declining effectiveness since 1978: the percentages of all pretransfer poor persons removed from poverty by cash transfers increased from 26.3 to 43.6 percent, and then declined to 37.5 percent. The pattern in each of the regions is the same. Transfers are least effective in the South in each year. Transfer benefits are much lower in the South than in other regions and some programs, notably Aid to Families with Dependent Children for Unemployed Parents and Medicaid for the medically indigent, are not even operated by most southern states. However, as with poverty rates, the southern region's antipoverty impact of transfers converges toward the U.S. average.

THE REAGAN POLICY TOWARD INCOME TRANSFERS

From 1967 to 1978, real cash transfers per household increased by 67 percent and real GNP per household increased by 9 percent, whereas from 1978 to 1982 real transfers declined by 1 percent and real GNP by 7 percent (Gottschalk and Danziger, 1984). How much of the recent increase in poverty is due to the retrenchment in income transfer programs initiated by the Reagan administration?

Before answering this question we review Reagan's changes in federal spending, which were designed both to reduce expenditures and to alter their composition. The first two columns of Table 3 demonstrate a growth in the ratio of federal spending to GNP from 18 to 23 percent and show the changes in budget shares that took place between 1965 and 1981 (the last pre-Reagan budget). The swing away from defense and toward income

Table 3

The Composition of the Federal Budget, 1965, 1981, 1986
(in percentage terms)

Category	Fiscal Year			
	Actual 1965 (1)	Actual 1981 (2)	Reagan's Budget Proposal for 1986 as Presented in 1981 (3)	February 1984 CBO Estimates for 1986 (4)
National defense, international affairs, and veterans' benefits and services	50.4%	29.5%	40.1%	33.0%
Transportation, community and regional development, and revenue sharing	6.5	6.0	3.7	4.3
Natural resources and environment, energy, and agriculture	5.8	4.5	2.5	3.1
Income security	21.7	34.3	32.8	31.9
Health	1.4	10.0	11.2	11.4
Education, training, employment, and social services	1.9	4.8	2.5	3.0
General government, interest, general science, space and technology, other	14.8	15.5	11.6	17.0
Offsetting receipts	-2.6	-4.6	-4.4	-3.7
Total	100.0	100.0	100.0	100.0
Total outlays as a percentage of GNP	18.0	23.0	19.0	23.3
Total outlays (billions of current dollars)	$118.4	$657.2	$912.0	$1,012.0

Source: U.S. Office of Management and Budget (1975), p. 48; Council of Economic Advisers (1981), p. 315; Congressional Budget Office (1984), p. 106.

Note: Some slight errors may exist due to reclassification of categories between 1965 and the present.

security, education and training, and especially health is apparent, and its reversal was the focus of the Reagan administration's reallocation of the budget. Column 3 indicates, by projecting budget shares to 1986, when all proposed changes would have been in place, the planned changes in priorities which Reagan put forward during the winter of 1981. Defense was to be expanded toward percentages prevailing in the early 1970s while education and training were to be rolled back to the lower levels of that same period. The income security expenditure share was to be cut 10 percent and the expansion in health expenditures was to continue, but at a much more modest pace.

What actually has been enacted by Congress is somewhat different, as can be seen by comparing columns 3 and 4. Column 4 presents February 1984 estimates of the 1986 budget size and shares assuming that current laws and policies, including those proposed by Reagan and already enacted by Congress, remain unchanged. Obviously he has not yet gained all of his expected defense increases. The 1983 Social Security Amendments provided somewhat larger cuts in income security then originally anticipated. This outcome was not reflected in the 1981 (column 3) budget projections. The health share is projected to rise above expectations because a proposed health cost containment package has not yet been fully enacted. Training costs will fall less than expected because of a new program introduced to combat the long recession. And the ratio of federal spending to GNP is even higher than it was in 1981, partly because not all the planned spending cuts were enacted, and partly because of the deep and prolonged recession.

On the expenditure side, then, Reagan and the Congress have slowed
the expansion of the welfare state and stepped up military expenditures.
In dollar terms, or even in terms of shares of the budget, as Table 3
indicates, expenditure changes other than defense have not been large.
However, it was in spending for the means-tested welfare programs that
the Reagan administration differed so much from previous administrations
and where the cuts were the largest.

Table 4 shows the proposed and enacted percentage changes in outlays
for each of the cash tranfer programs included in the CPS data used in
this paper. Since Social Security is by far the largest program, its
proposed and enacted changes dominate the totals. Thus, cash transfers
in the CPS data are about 6 percent lower than they would have been had
pre-Reagan policies remained constant.

President Nixon's Family Assistance Plan (FAP) and President Carter's
Program for Better Jobs and Income (PBJI) both intended to establish a
national minimum income guarantee, to extend benefits to persons who were
categorically ineligible under existing programs, and to promote work
incentives by keeping marginal benefit reduction rates on earnings well
below 100 percent. As such they would have both raised the safety net
and filled in some of its gaps, particularly regional differences in
eligibility requirements and benefit levels. Both also generated fatal
congressional opposition and harsh criticism from policy analysts who
pointed out that these reforms and the goal of controlling social
spending were incompatible.

Unlike his predecessors, President Reagan succeeded in reforming
welfare. The Omnibus Budget Reconciliation Act of 1981 (OBRA) reduced
costs and caseloads by raising the tax rate on welfare recipients'

Table 4

Estimated Outlay Changes of Cash Transfers in FY 1985:
Reagan Administration Proposals and
Congressional Actions Through FY 1984

Program	Projected Outlays Pre-Reagan (In $ billions) (1)	Proposed Changes as % of Baseline (2)	Enacted Changes as % of Baseline (3)
Social Security	200.6	-10.4	-4.6
Veterans' Compensation	10.7	-8.4	-0.9
Veterans' Pensions	3.8	-2.6	-2.6
Supplemental Security Income (SSI)	8.1	-2.5	+8.6
Unemployment Insurance	29.8	-19.1	-17.4
Aid to Families with Dependent Children (AFDC)	9.8	-28.6	-14.3
Totals	262.8	-11.6	-6.2

Source: Palmer and Sawhill (1984), p. 185.

earnings and by establishing more restrictive gross income limits. It did not, however, lower the safety net for those who do not work. The philosophy behind the cuts was to transform certain income transfer programs from a general support system encouraging simultaneous receipt of wages and welfare to a "safety net" that forced a choice between work and welfare.

The administration argued that the breakeven level for welfare benefits was so high in some states because of the work incentive provisions it eliminated (the $30-and-one-third rule) that many who were not "needy" were receiving welfare. Further, work incentives served more to keep families dependent on welfare than to encourage work. Welfare had become an income supplement and previous welfare reforms were, according to a Reagan adviser attempts "by a largely liberal, intellectual elite . . . to foist on an unsuspecting public . . . a guaranteed income" (Anderson, 1984, p. 25). Work effort was best provided by work requirements (proposed, but not enacted) and not work incentives.

Generally speaking, those who did not work lost only a small portion of their benefits. The biggest losers were the "working poor" and not the "poorest of the poor," who are out of the labor force. For example, the U.S. House of Representatives, Committee on Ways and Means (1984b) reports that in 1980, 46 states would have provided AFDC benefits to a woman with two children who had earnings at 50 percent of the poverty line; by 1984, only 24 would have provided benefits. For a woman with wages equal to three-quarters of the poverty line, the number of states paying AFDC dropped from 37 to 6. In addition, a woman with earnings equal to three-quarters of the poverty line had a negative federal tax burden in 1980 (payments from the Earned Income Tax Credit exceeded the

sum of the Social Security and personal income taxes), but a positive burden in 1984. In 1980, this woman's disposable income would have been 108 percent of the poverty line, while by 1984 it would have dropped to 92 percent.

Robert Lampman (1974) has argued that the declaration of the War on Poverty had an immediate and far-reaching effect--it required all existing programs and proposals for policy changes to address the question, "What does it do for the poor?" The Reagan economic program asks instead, "What does it do for the incentives to work and to save?" As a result, we share Lampman's (1983) judgment that the fundamental effect of the declining rate of growth of federal revenues, the reordering of domestic versus military priorities, and the vast projected budget deficit mean "that it is extraordinarily difficult to initiate new social spending measures in the field which the President has set. In that sense, the President's design for calling a halt to the growth of welfare statism seems to have won the day" (p. 381). If this is the case, then the comparisons of 1978 and 1982, which we make below, show too small an effect of the recent changes--they compare "What was" with "What is," rather than with "What would have been had there been no cuts."

Given that these changes in the various programs differentially affect demographic groups, we examine changes in the antipoverty impact of transfers for households headed by nonaged persons (less than 65 years of age) by sex of head. We disaggregate by region because of the long-standing regional differences in benefit levels and eligibility require-ments in transfer programs. We use household rates, since transfer benefits generally vary with household size and income. The household

measure treats all households equally, regardless of the number of persons.

CHANGES IN TRANSFERS AND THE TREND IN POVERTY

Table 5 shows the pretransfer and posttransfer poverty rates and their percentage changes from 1978 to 1982 and the antipoverty impact of transfers in those two years. While the regional variations noted above are evident in these data, they are much smaller than the male-female differences. In each region, households headed by women are four to fives times more likely to be poor than those headed by men. In this period, however, the percentage increase in both pretransfer and posttransfer poverty rates was larger for men. Because of their lower wage rates and lower labor force participation rates, women have poverty rates that are relatively immune to macroeconomic conditions--they are high at all stages of the business cycle.

For both men and women, the most rapid increase in the pretransfer poverty rate was in the North Central region and the least rapid was in the South. This reflects regional differences in the severity of the recent recession. Between 1978 and 1982, the unemployment rate increased from 6.1 to 9.7 percent in the United States, but from 5.3 to 11.1 percent in the North Central region and from 5.6 to 8.9 percent in the South.

Posttransfer poverty for all the groups shown increased more rapidly than pretransfer poverty (compare column 6 to column 3), indicating that the total rise in poverty cannot be attributed to the recession. Transfers removed from poverty a smaller percentage of the pretransfer

Table 5

Incidence of Poverty among Nonaged Households, by Sex of Head and Region

Nonaged Household Head with Children under 18	Percentage of Households Pretransfer Poor		Percentage Change, 1978-1982	Percentage of Households Posttransfer Poor		Percentage Change, 1978-1982	Antipoverty Impact of Transfers	
	1978 (1)	1982 (2)	(3)	1978 (4)	1982 (5)	(6)	1978 (7)	1982 (8)
Male								
Northeast	7.6%	10.8%	+42.1%	5.4%	8.4%	+55.6%	28.9%	22.2%
North Central	6.2	11.8	+90.3	4.5	8.8	+95.6	27.4	25.4
South	10.6	14.4	+35.8	8.2	11.6	+41.5	29.3	19.4
West	8.9	14.0	+57.3	6.3	11.1	+76.2	41.3	20.7
All Regions	8.4	12.9	+53.6	6.2	10.1	+62.9	26.2	21.7
Female								
Northeast	57.8	56.0	−3.1	46.6	49.1	+5.4	19.4	12.3
North Central	50.5	58.2	+15.2	40.6	50.4	+24.1	19.6	13.4
South	53.6	55.4	+3.4	47.0	50.1	+6.6	12.3	9.6
West	46.0	49.6	+7.8	35.5	41.3	+16.3	29.6	16.7
All Regions	52.4	55.0	+5.0	43.2	48.2	+11.6	17.6	12.4

Source: Computations by authors from March 1968, 1979, and 1983 Current Survey data tapes.

Note: Percentage change is defined as $((X_{1982} - X_{1978})/X_{1978}) \times 100$ for poverty rates and as $((Pretransfer - Posttransfer)/Posttransfer) \times 100$ for the antipoverty impact.

poor in 1982 than in 1978 for all groups. The antipoverty impacts shown

here for the nonaged are smaller than those shown in Table 2 for all per-

sons because by far the largest antipoverty impacts occur among the aged.

The impacts are larger for households headed by men than for those headed

by women because men generally receive social insurance transfers that

are based on prior earnings and have higher maximum levels than the

welfare transfers generally received by women.

Table 6 shows in greater detail some components of the antipoverty

impact of transfers. Consider first the percentage of pretransfer poor

households receiving transfers (columns 1 and 2) and among those house-

holds, the percentage receiving enough to raise them above the poverty

line (columns 3 and 4). These two components provide additional insight

into the male-female differences in the antipoverty impact of transfers.

In each year and in region, poor women are more likely to receive trans-

fers than men, but much less likely to be taken out of poverty. For

example, in 1982 three-quarters of households headed by women received

transfers, while only 56 percent of those headed by men received them.

But less than one-fifth of the former received enough transfers to raise

them above the poverty line, while about 40 percent of male-headed house-

holds were so raised.

Women are less likely to be taken out of poverty then men both

because their mean poverty gaps are higher and because their average

transfers received are smaller. In 1982 the mean pretransfer poverty

gap for all female-headed households was $6615 and the average transfer

amount for those receiving transfers was $4377; for male-headed house-

holds the corresponding figures were $5477 and $5141. In 1978 the gaps

were $6489 and $5445 (in 1983 dollars) for women and men and the trans-

Table 6

Components of the Antipoverty Impact of Transfers among
Nonaged Households, by Sex of Head and Region

Nonaged Household Head with Children under 18	Percentage of Pretransfer Poor Households Receiving Cash Transfers		Percentage of Pretransfer Poor Transfer Recipients Who Escape Poverty		Percentage Change, 1978–1982, in Real Values of Average		Increase in Posttransfer Poverty Due to Changing Transfer Programs as a Percentage of	
					Posttransfer Poverty Gap	Cash Transfers	Posttransfer Households in Poverty, in 1982	Increased Number of Posttransfer Poor Households, 1978–1992
	1978 (1)	1982 (2)	1978 (3)	1982 (4)	(5)	(6)	(7)	(8)
Male								
Northeast	68%	63%	43%	36%	+5.6%	−29.3%	8.5%	25.9%
North Central	59	63	47	41	−2.6	−26.8	3.0	6.4
South	51	50	45	39	−3.1	−32.6	4.2	12.9
West	55	55	51	38	+5.7	−22.5	9.5	20.9
All Regions	57	56	46	39	+0.6	−28.3	6.0	14.5
Female								
Northeast	85	83	23	15	+2.8	−20.2	8.2	79.2
North Central	77	83	26	16	+9.3	−16.2	7.6	23.2
South	74	67	17	14	−0.1	−11.6	3.4	14.0
West	76	74	30	23	−2.9	−12.3	7.3	23.8
All Regions	78	75	23	16	+1.9	−16.9	5.9	24.0

Source: Computations by authors from March 1968, 1979, and 1983 Current Population Survey data tapes.

Notes: Percentage change is defined as $((X_{1982} - X_{1978})/X_{1978}) \times 100$.

fers received were $5124 and $7097. Thus, the poverty gap for women was about 20 percent higher than that for men in both years, while transfers were about 28 percent lower in 1978 and about 15 percent lower in 1982, respectively.

The probability of transfer receipt was relatively constant in all regions and for men and women over the 1978-1982 period, but the probability of escape from poverty given receipt declined for all groups. This result follows from the way the budget cuts were structured--poor households were more likely to receive reduced transfers than to be totally removed from the programs. Note that these conditional probabilities of escape given receipt, while rather low, do not reflect the fact that almost half of poor male-headed households and a quarter of poor female-headed units receive no transfers at all. Although the rapid growth of transfers was a prime motivator of the Reagan budget cuts, these significant gaps in coverage and inadequate benefit levels have received little attention.

Columns 5 and 6 of Table 6 show that the decreased probability of escape given receipt can be roughly attributed to the declining real value of transfers and not to macroeconomic conditions. The real pretransfer poverty gap increased by less than 1 percent for all poor men and by less than 2 percent for all poor women. The gap for male transfer recipients actually declined by 3 percent; for female recipients, it increased by 2 percent. Some portion of the increased gap is due to the elimination of public employment positions previously funded through the Comprehensive Employment and Training Act (CETA) and might thus be attributed to program changes. The reduced escape probabilities therefore reflect the decline in real value of cash transfers of almost 30 percent

for men and about 17 percent for women. This decline is due both to the administration's budget cuts and the fact that benefits in programs that are not indexed to consumer prices by law (e.g., AFDC, Unemployment Insurance) have been falling in real terms since the mid-1970s.

The final two columns of Table 6 present the results of a simple statistical exercise which computes how much of the observed increase in the number of posttransfer poor households between 1978 and 1982 can be attributed to the observed declines in the probability of transfer receipt and the probability of escape given receipt. We begin by assuming that the program changes did not affect the demographic composition of households and pretransfer poverty.[6] We then multiply the number of pretransfer poor households in each group in 1982 by the corresponding 1978 probabilities shown in columns 1 and 3. This yields the number of poor households in 1982 who would have been removed from poverty by transfers if the 1978 transfer probabilities had remained constant. Subtracting from this simulated number the actual number of households removed from poverty in 1982 yields the increase in the number of poor households due to transfer program changes.

In column 7 this number is expressed as a percentage of the total number of posttransfer poor households in 1982; in column 8, as a percentage of the increase in the number of posttransfer poor households between 1978 and 1982. We find that the number of poor households in 1982 was about 6 percent higher among those headed by both men and by women than it would have been if the two probabilities had not changed.

Since the percentage increase in the number of poor households between 1978 and 1982 was so much higher among families headed by men (Table 5), the additional 6 percent poor households account for about 15

percent of the increased male-headed poor families and about 25 percent
of the female-headed poor families.[7] This differential is not surprising,
since many female household heads either lost eligibility for AFDC or
had their benefits significantly reduced by the new program rules. Our
results are in general agreement with a recent microsimulation study
released by the U.S. House of Representatives, Committee on Ways and
Means (1984a), which attributed a larger percentage of the observed
poverty increase among female household heads to program changes and a
larger percentage among male household heads to the recession.

AN ECONOMETRIC MODEL OF THE ANTIPOVERTY IMPACTS OF TRANSFERS

The descriptive data presented so far have not controlled for varying
personal characteristics of the poor or differences in the extent of
their poverty. As a result, we have ignored the fact that the probabili-
ties that a poor household will receive a transfer or escape from poverty
will vary widely according to household characteristics. For example, a
nonworking widow with children will be eligible for Social Security bene-
fits that are not affected by her other sources of income, while a
nonworking divorced woman's AFDC benefits will be so affected.
Similarly, a poor household with income just below the poverty line is
likely to be treated differently by transfer programs than a household
with little pretransfer income. In order to examine more closely the
antipoverty impacts of transfers, we have estimated a two-equation econo-
metric model of the antipoverty impact of cash transfers.

We do not attempt to model the macroeconomy or the labor market here. Rather, a household's pretransfer income is assumed to be exogenous, just as it was in our descriptive analysis. The statistical model we use can be termed a probit equation with sample selection. At a point in time (in this case 1978 or 1982) a pretransfer poor household has the potential to receive a transfer, and, if one is received, to escape poverty. Two functions can be defined to parameterize these potentials:

(1) $y_1 = X\beta + \varepsilon_1$

(2) $y_2 = Z\delta + \varepsilon_2,$

where y_1 is the potential to receive a transfer and y_2 is the potential to escape poverty.

The specification and estimation of this model are discussed in the Appendix. The first regression included all households with pretransfer incomes below the poverty line; the second, only those households which were pretransfer poor and which receive any cash transfers.

The regression coefficients derived from this model allow us to control for changes in personal characteristics that have occurred since 1978, changes which could not be incorporated in the decomposition analysis of Table 6. Table 7 shows several series of predicted probabilities of transfer receipt for pretransfer poor nonaged female household heads for 1978 and 1982 in columns 1 and 2. Columns 3 and 4 show the predicted conditional probabilities of escape from poverty given receipt. These probabilities are computed by evaluating the regression coefficients at the 1982 weighted sample means for all of the independent variables except the one which is allowed to vary in each panel of Table 7.

Table 7

Predicted Probabilities of Changes in the Antipoverty Impacts of Transfers,
Nonaged Female Heads of Household with Pretransfer Income below the Poverty Line

	Probability of Receiving a Transfer		Probability of Escaping Poverty Given Receipt of a Transfer		Unconditional Probability of Escape[a]		Change in Number per 100 Poor Who Escape Poverty[b]
	1978 (1)	1982 (2)	1978 (3)	1982 (4)	1978 (5)	1982 (6)	1978–1982 (7)
Variation by Race and Hispanic Origin[c]							
White	.783	.764	.238	.184	.186	.141	−4.5
Black	.878	.845	.069	.055	.060	.046	−1.4
Hispanic	.901	.831	.142	.046	.128	.038	−9.0
Variation by Marital Status for White Female Head[d]							
Never married	.885	.811	.176	.129	.156	.104	−5.2
Divorced or separated	.704	.705	.162	.152	.114	.107	−0.7
Widowed	.961	.949	.670	.603	.643	.572	−7.1
Variation by Region for White Female Head[e]							
Northeast	.865	.787	.298	.259	.257	.204	−5.3
North Central	.768	.837	.288	.176	.221	.147	−7.4
South	.708	.624	.081	.129	.058	.080	+2.2
West	.802	.794	.367	.227	.294	.180	−11.4
Variation by Distance from the Poverty Line for White Female Head[f]							
0.25	.795	.778	.215	.166	.171	.129	−4.2
0.75	.537	.501	.693	.709	.372	.355	−1.7

[a]Defined as the product of the probability of receipt by the pretransfer poor $\left(\frac{R}{P}\right)$ from column 1 or 2 and the conditional probability of escape given receipt $\left(\frac{E}{R}\right)$ from column 3 or 4; thus the unconditional probability of escape for a pretransfer poor household equals $\left(\frac{E}{P}\right)$.

—notes continue—

Table 7, continued

^bDefined as the difference between the probabilities in columns 6 and 5 multiplied by 100.

^cEvaluated using 1979 and 1982 coefficients from Appendix Table A and 1982 race-specific means for all the independent variables for both years.

^dEvaluated using 1979 and 1982 coefficients from Appendix Table A and 1982 means for all white female heads for all independent variables except for marital status for both years.

^eSame as d, except for region.

^fSame as d, except for distance from the poverty line.

Columns 5 and 6 are the unconditional probabilities of escape, the products of the probabilities shown in columns 1 and 3 and columns 2 and 4, respectively. The final column shows the 1978-1982 change in the number of poor households per 100 poor households who escape poverty. It is merely the difference between columns 6 and 5 multiplied by 100. Since we have held personal characteristics at their 1982 means and allowed the coefficients to vary, we now have a "true" measure of the change in the number of poor households due to changes in the antipoverty impact of transfer programs.

For example, the first panel shows that in 1982, 76.4 percent of all white female heads received transfers and 18.4 percent of the recipients escaped poverty. If the transfer system had not changed since 1978, then 78.3 percent of the 1982 population of female heads would have received them and 23.8 percent would have escaped. The probabilities of receipt for blacks and Hispanics are higher than for whites in each year, but their probabilities of escape are much lower. This is primarily because whites are more likely to receive social insurance transfers, which are higher on average than welfare transfers. For whites and Hispanics, the declines in the escape probabilities are the bigger of the changes in the two components. The last column shows that if the transfer system were as effective in 1982 as it was in 1978, there would be 4.5 percent fewer white, 1.4 percent fewer black, and 9 percent fewer Hispanic households headed by women in poverty. What is striking, nonetheless, is how low the probabilities of escape are for these women in each year.

The second panel shows that transfers have a much greater antipoverty impact for widows than for other female heads--they are more likely to receive transfers and much more likely to escape poverty. This is due

to their receipt of Social Security survivor's benefits, which are on average much higher than other transfers.

The variation by region shows the familiar pattern--the lowest probabilities of receipt and escape in the South, but regional convergence. The variation by distance from the poverty line is as expected--the poorest have a greater probability of receipt but a smaller probability of escape. Regardless of the distance from the poverty line, however, the percentage decline in the number who escape is similar.

These results are consistent with those of our statistical decomposition. Since 1978, changes in transfer programs have reduced their antipoverty effectiveness. These declines, however, are relatively small in contrast to the increased antipoverty impacts of the 1967 to 1978 period (see Table 2).

IMPLICATIONS FOR ANTIPOVERTY POLICY DURING THE MID-1980s

We have shown that the antipoverty impact of transfer programs has declined since 1978 and that poverty rates remain high, particularly for female-headed households. What are the prospects for reducing poverty in the next several years?

Gottschalk and Danziger (1984) have projected that the aggregate poverty rate will remain above the 1978 rate through the late 1980s even if the economy continues to grow as fast as the Reagan administration expects. A return to "full" employment would substantially reduce poverty rates for nonaged men, but would have a much smaller impact on the aggregate rate because this group represents an increasingly smaller portion of the total poverty population. Thus, if poverty is to fall,

the economy must grow and there must be a renewed antipoverty initiative directed at curbing the "feminization of poverty." About half of these households headed by women with children remain poor (Table 5) even though about three-quarters of such households receive income transfers (Table 6). And both our statistical decomposition and econometric analysis show that these households have been adversely affected by the recent program changes.

It is beyond the scope of this paper to analyze a comprehensive strategy to lower poverty among families headed by single women. But we can offer a few suggestions. First, AFDC guarantees, which have fallen on average by more than a third in real terms since 1970, should be indexed to the same price index used to update the poverty threshold. And a national minimum AFDC benefit should be introduced. The indexation of Social Security benefits and the introduction of a national minimum benefit in the Supplemental Security Income program are the key reasons why poverty for the aged declined throughout the 1967-1982 period. These changes would have a particularly large impact on poverty in the South, where benefits were low to start and have eroded the most in recent years.

Second, a targeted employment program that allows recipients to mix work and welfare should be introduced. The Supported Work Demonstration project (Manpower Demonstration Research Corporation, 1980) provides an example of the antipoverty possibilities of such a program. Danziger and Jakubson (1982) used Supported Work data to simulate the national effects of implementing such a program. They found that over 80 percent of the AFDC participants would have been poor if they merely had access to current transfer programs, whereas only 35 percent would have been poor

if they also had access to the jobs program. Unlike a negative income tax, this type of employment program both increases work effort and reduces poverty.

These reforms obviously increase public spending. In contrast, a third reform is a social child support program that attempts to minimize the need for additional public funds. Under that program, all adults who care for a child and do not live with the child's other parent would be eligible for a support payment that would be financed by a percentage-of-earnings tax on the absent parent. If the tax on the absent parent fell below a fixed minimum level, because the parent's earnings were too low, the support payment would be supplemented up to that level by government funds. Even if total government AFDC expenditures were maintained at current levels, the program could reduce poverty because of the additional revenue raised from absent parents (Oellerich and Garfinkel, 1983).

What are the prospects for any new antipoverty initiatives? While the voters clearly called for a retrenchment of the welfare state by electing Reagan, they have shown no enthusiasm for the recent large increases in poverty. And even though the Reagan administration has reduced the scope of transfer programs, it has not abandoned their primary goals—the provision of minimum levels of cash, nutritional, medical, housing, and educational assistance for a substantial portion of the population.

During its first year in office, the administration proposed drastic cutbacks in most social programs. But because so many households are direct beneficiaries of at least one program, widespread voter and congressional opposition developed. This was particularly true for

programs with the broadest range of recipiency across the income distribution (e.g., Social Security, educational financing program for college students). As a result, only a small portion of the cuts were in programs whose benefits were widely distributed. The large cuts were in income-tested welfare programs that provide benefits only for those toward the bottom of the income distribution. But because they serve fewer recipients, and because the benefits of the poorest were least affected, budgetary savings as a percentage of the total budget were small.

These cuts came, however, on top of a deep recession, and those events together raised poverty rates back to the levels of the late 1960s. This increase now limits the administration's ability to obtain enactment of additional cuts in transfer programs.[8] Indeed, it is now clear to the administration that the technical and political problems that make large distributional changes difficult are synergistic. In its defense of the fiscal year 1984 budget proposals, the U.S. Office of Management and Budget (1983) stated that "entitlement programs develop vast networks of dependency that cannot be precipitously altered without unacceptable social and human costs. As a consequence, their claim on the budget and national economy . . . can be reduced only slowly" (Chap. 3, p. 9). Unfortunately, there remains a large gap between a decision to refrain from asking for further transfer cuts and one to propose increased antipoverty expenditures.
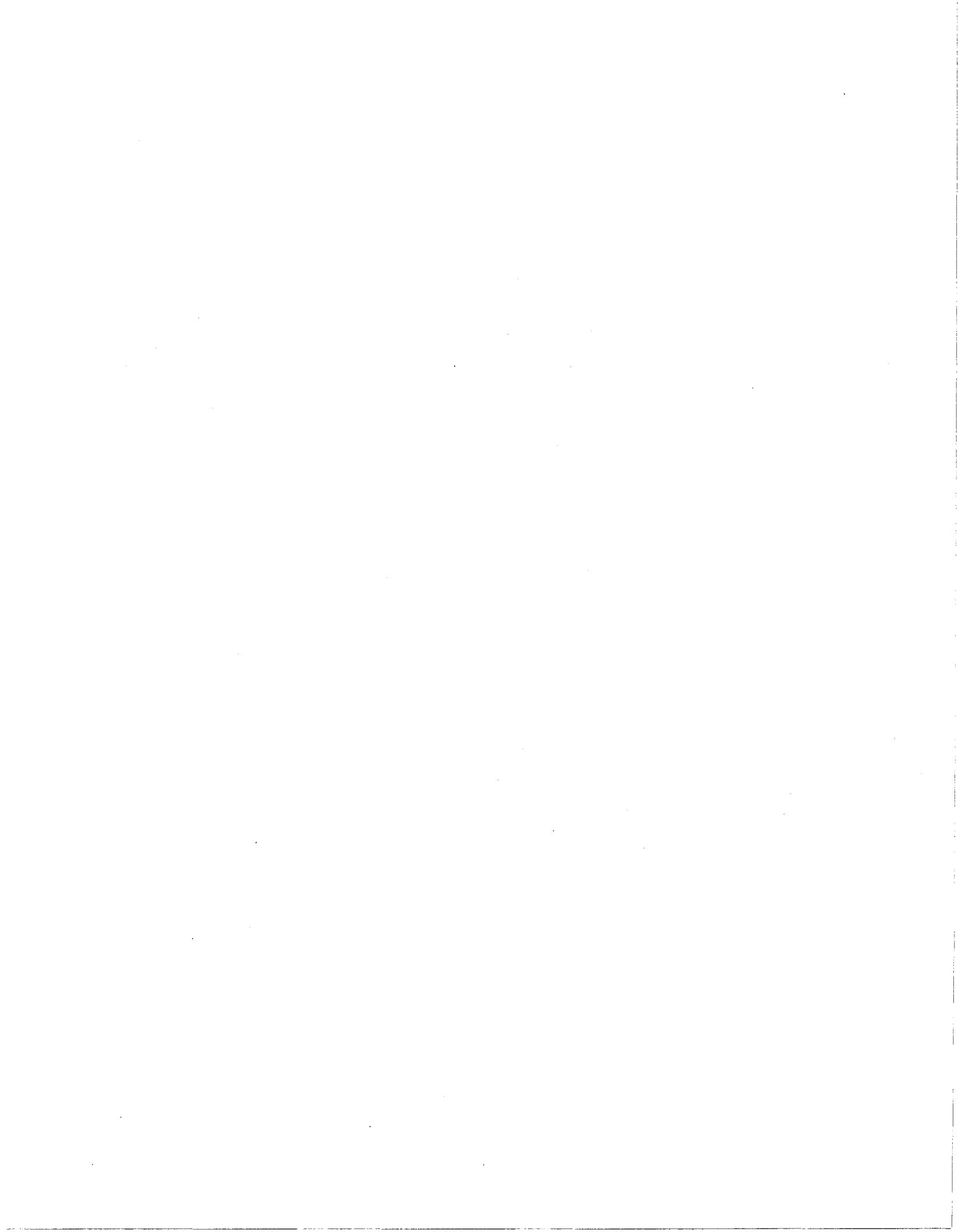
APPENDIX

Let y_1 be the potential to receive a transfer and y_2 be the potential to escape poverty. Then,

$$(1) \quad y_1 = X\beta + \varepsilon_1$$

$$(2) \quad y_2 = Z\delta + \varepsilon_2.$$

However, only y_1^* and y_2^*, indicators of y_1 and y_2, are observed.

$$(3) \quad y_1^* = \begin{cases} 1 \text{ if } y_1 > 0 \\ \\ 0 \text{ if } y_1 \leqslant 0 \end{cases}$$

and y_2^* is observed only if $y_1^* = 1$.

$$(4) \quad y_2^* = \begin{cases} 1 \text{ if } y_2 > 0 \text{ and } y_1 > 0 \\ \\ 0 \text{ if } y_2 \leqslant 0 \text{ and } y_1 > 0 \end{cases}$$

$$\begin{matrix} \text{unobserved} \\ \text{or undefined} \end{matrix} \text{ if } y_1 \leqslant 0 \ .$$

There is some ambiguity surrounding the domain of ε_2. In what is termed the "sequential-decision" model by Maddala (1983), ε_2 is only defined if $y_1^* = 1$ (or $\varepsilon_1 > -X\beta$). The likelihood function (given the assumption that the ε_i are normally distributed) is

$$(5) \quad \pounds = \prod_{i=1}^{n} \Phi(X\beta)^{y_1^*} [1 - \Phi(X\beta)]^{(1 - y_1^*)} [\Phi(Z\delta)^{y_2^*} (1 - I(Z\delta))^{(1-y_2^*)}]^{y_1^*} ,$$

where Φ is the standard normal cumulative distribution function.

The estimation of this model can be accomplished in two steps. First, estimate a univariate probit on the indicator y_1^* for the those who are pretransfer poor to get estimates of β. Then estimate a univariate probit on the indicator y_2^* only on those pretransfer poor who received a transfer to get estimates of δ. This procedure allows conditional inference on the probability of escaping poverty, but it does not allow the likelihood of escaping poverty to affect the probability of receiving transfers. If there are unobserved characteristics that affect both probabilities, then the estimates will be biased. Consider, for example, the unobserved variable, "knowledge of how the system operates." A household head who scores high on this variable will be both more likely to receive a transfer and more likely to receive a larger transfer and hence to escape poverty than one who scores low.

This correlation can be incorporated by changing the assumption on the domain of ε_2. While the situation is still one of sequential decision, ε_2 is defined for the entire population but is only observed when $\varepsilon_1 > -X\beta$. This is a censoring problem that can be easily handled with the additional assumption that

$$(6) \quad \begin{pmatrix} \varepsilon_1 \\ \varepsilon_2 \end{pmatrix} \sim \text{Biv. Normal} \left(\begin{pmatrix} X\beta \\ Z\delta \end{pmatrix}, \begin{pmatrix} 1 & \rho \\ \rho & 1 \end{pmatrix} \right) .$$

The estimation can no longer be done in two steps. The likelihood function is now

$$(7) \quad \pounds = \prod_{i=1}^{n} [1 - \Phi(X\beta)]^{(1-y_1^*)} \quad F(X\beta, -Z\delta, -\rho)^{y_1^*(1 - y_2^*)} \quad F(X\beta, Z\delta, \rho)^{y_1^* y_2^*}$$

where Φ is as before and F is the bivariate normal cumulative distribution function.

Another way to conceptualize the problem is to examine the log like-lihood and define three mutually exclusive subsets of the sample. Let A by those for whom $y_1^* = 0$, that is, those who do not receive a transfer. Let B be those for whom $y_1^* = 1$, and $y_2^* = 0$, those who receive a transfer but are not removed from poverty. And let C be those for whom $y_1^* = 1$ and $y_2^* = 1$, those who both receive a transfer and escape poverty. The log likelihood function can then be expressed as

$$(8) \quad L = \sum_{i \, A} \ln(1 - \Phi(X\beta)) + \sum_{i \, B} \ln(F(X\beta, -Z\delta, -\rho)) + \sum_{i \, C} \ln(F(X\beta, Z\delta, \rho)).$$

The preceding models analyze only whether or not transfers remove a poor household from poverty. Since transfers are continuous, the model could be rewritten to focus on the extent to which transfers alleviate poverty. Let T equal the amount of transfers, and rewrite equations (1) and (2) as

$$(9) \quad y_1 = X\beta + \varepsilon_1$$

$$(10) \quad T = Z\delta + \sigma\varepsilon_2,$$

where σ is scale parameter.

The likelihood function would then be

$$(11) \quad \mathcal{L} = \underset{i \; A}{\Pi} \; (1 - \Phi(X\beta)) + \underset{i \; B}{\Pi} \; \int_{-X\beta}^{\infty} \frac{1}{\sigma} G\left(\varepsilon_1, \frac{T - Z\delta}{\sigma}\right) d\varepsilon_1.$$

We have estimated weighted regressions for both the univariate (equation 5) and bivariate (equation 7) models for nonaged female household heads with children. In the second specification, there was strong evidence against the hypothesis that $\rho = 0$. We report those results in Table A.[9] The first equation included all households with pretransfer incomes below the poverty line. The dependent variable took the value of one if the household received any cash transfers, zero otherwise. In the second, we include only those households which were pretransfer poor and which received any cash transfers. The dependent variable took the value of one if the household was removed from poverty by the transfers, zero otherwise.

We weighted the log-likelihood function by the CPS sample weights so that the estimated equation would accurately reflect the published (weighted) variable means. The weights were adjusted so that the number of observations shown at the end of Table A is the number of unweighted observations. The procedure is the same as Manski and Lerman's (1977) correction for choice-based sampling. The fact that weighted and unweighted means for the dependent variables differ raises the possibility that the CPS sample stratification is in some way correlated with transfer receipt or low income. Examining this possibility is beyond the scope of this paper.

Table A

Determinants of the Antipoverty Impact of Transfers,
Nonaged Female Heads of Households with Pretransfer
Income below the Poverty Line

Independent Variables	Probability of Receiving a Transfer		Probability of Escaping Poverty Given Receipt of a Transfer	
	1978 (1)	1982 (2)	1978 (3)	1982 (4)
Constant	1.209 (.205)	.925 (.162)	-.844 (.153)	-1.539 (.194)
Black	.043 (.132)	.078 (.118)	-.281 (.125)	-.379 (.138)
Hispanic	-.067 (.203)	-.129 (.117)	-.148 (.195)	-.551 (.230)
Family size 2	-.022 (.134)	-.197 (.108)	.194 (.145)	-.083 (.139)
Family size 5+	.121 (.139)	.426 (.124)	-.326 (.147)	-.082 (.175)
Region North Central	-.369 (.160)	.183 (.143)	.141 (.158)	-.222 (.181)
South	-.554 (.152)	-.483 (.140)	-.304 (.184)	-.576 (.173)
West	-.252 (.178)	.021 (.158)	.251 (.178)	-.089 (.172)
Residence Central city	.253 (.134)	-.059 (.120)	--	--
Suburban	-.013 (.146)	-.131 (.132)	--	--
SMSA not identified	-.180 (.202)	-.305 (.171)	--	--

(table continues)

Table A, continued

Independent Variables	Probability of Receiving a Transfer		Probability of Escaping Poverty Given Receipt of a Transfer	
	1978 (1)	1982 (2)	1978 (3)	1982 (4)
Age				
<25 years	-.138 (.186)	.119 (.143)	-.393 (.202)	-.032 (.177)
25-34 years	-.130 (.123)	.224 (.109)	-.367 (.155)	-.041 (.151)
55-61 years	.494 (.512)	-.344 (.295)	-.123 (.215)	-.138 (.326)
62-64 years	.097 (.533)	-.132 (.572)	-.191 (.386)	-.146 (.713)
Completed Schooling				
<9 years	.315 (.182)	.292 (.146)	--	--
9-11 years	.251 (.120)	.319 (.115)	---	---
13-15 years	-.062 (.163)	-.597 (.141)	--	--
16+ years	-.558 (.298)	-.597 (.286)	--	--
Has disability	.224 (.185)	.261 (.158)	-.367 (.189)	.585 (.156)
Student	.014 (.232)	-.130 (.178)	.251 (.287)	.304 (.248)
Marital Status				
Never married	.664 (.180)	.343 (.128)	.309 (.178)	-.017 (.168)
Widowed	1.224 (.241)	1.097 (.176)	.796 (.179)	1.424 (.166)

(table continues)

Table A, continued

Independent Variables	Probability of Receiving a Transfer		Probability of Escaping Poverty Given Receipt of a Transfer	
	1978 (1)	1982 (2)	1978 (3)	1982 (4)
Ratio of pretransfer income to poverty line	-1.463 (.171)	-1.523 (.143)	2.644 (.219)	1.949 (.305)
ρ	-.893 (.108)	.763 (.206)	-.893 (.108)	.763 (.206)
No. of Observations	1030	1293	827	988
Log likelihood	-663.4	-822.5	-663.4	-822.5

Notes: The constant in columns 1 and 2 refers to a pretransfer poor white household head of family size three or four persons living outside of a metropolitan area in the northeast region who is 35-54 years of age has completed twelve years of school is not disabled or a student and who is divorced or separated. In columns 3 and 4 it is the same, except for residence and education, which are omitted from the equations.

Asymptotic standard errors appear below coefficients in parentheses.

The independent variables were sets of dummies for the household head's race or Hispanic origin, household size, regional and metropolitan residence, age, education, and marital, disability, and student status. Also included was the ratio of pretransfer income to the poverty line. The probability=of=receipt equation included all the variables listed. Tunali (1983) shows that at least one restriction is necessary for identification of the model. Therefore, we omit the residence and education dummies from the second equation to aid the identification of the model. Education and residence are expected to affect one's knowledge of and access to transfer programs and thus to influence participation, but not to affect the amount of the transfer received and hence the probability of escape from poverty.

The general pattern of results--but not the relative magnitudes of the coefficients--is similar for each year. For example, ceteris paribus, the probability of receiving transfers increases with family size, is lowest in the South, higher for those with a disability, highest for widows, and lowest for Hispanics. Not surprisingly, those among the poor who are closest to the poverty line are less likely to receive transfers. But if they do receive transfers, they are much more likely to escape poverty. The probability of receiving enough transfers to escape poverty is lowest in the South, and highest for widows and whites.

Notes

[1]The omission of in-kind transfers biases downward estimates of transfer recipiency and biases upward estimates of the incidence of posttransfer poverty. Plotnick and Smeeding (1979) show that in 1974 an additional 2 to 3 percent of the population received in-kind transfers for food, housing, and/or medical care, but did not receive cash transfers.

On the other hand, some have suggested that direct taxes should be subtracted from money income if in-kind transfers are added. According to the Census Bureau data provided to the U.S. House of Representatives, Committee on Ways and Means (1984c), in 1982 federal and state income and payroll taxes increased the number of poor people by 3.175 million, while food stamps and public housing reduced the number of poor by 2.799 million. However, if a value for medical care transfers is added, then the net effect of adding the major in-kind transfer benefits and subtracting taxes is to reduce the poverty count by 8.328 million persons if in-kind transfers are valued at their market costs, or by 2.155 million persons if they are added at the value that recipients would be willing to pay for them (U.S. Bureau of the Census, 1984).

[2]Because of the way the data are reported, public employee pensions are counted as a government transfer, like Social Security retirement benefits, not as a component of posttransfer income, like private pensions.

[3]For example, consider an individual who earns $3000. Assume that after the passage of a public assistance program, with an income guarantee of $3000 and a tax rate of 50 percent, the person reduces hours of

work and earns $2500. A transfer of $1750 is now received and total income is $4250, but the individual's final income is only $1250 higher. Because pretransfer income in the absence of transfers is not observed, we and the authors of most other studies measure the redistributive effect as the difference between pretransfer and posttransfer income ($4250 - $2500), not as the increase in final income. Plotnick's (1984) simulation study shows that, in the absence of transfers, pretransfer poverty in 1974 for nonaged families would have been 12.4 percent rather than the observed 13.9 percent. Since posttransfer poverty was 11.4 percent, the simulation reduces the estimated antipoverty effect of transfers from 18 to 8 percent.

[4]See Gottschalk and Danziger (1984) for an analysis of the relationship between macroeconomic conditions, income transfers, and poverty.

[5]These patterns would not change if in-kind transfers were valued and added to cash income. See Danziger and Gottschalk (1983) for a discussion. The patterns are also the same in the 1983 data, released after this paper was completed. Poverty was 15.0 percent in 1982 and 15.2 percent in 1983.

[6]If program changes, such as the elimination of public jobs, increased pretransfer poverty, then our estimates are too low.

[7]At the conference, Paul Courant suggested that we focus explicitly on changes in the antipoverty impact of transfers under Reagan by using data for the 1980 to 1983 period (the 1983 data became available shortly after the conference). Such a comparison also reduces the variation in economic conditions between the two chosen years. We reproduced the data in Tables 5 and 6 for 1980 and 1983 and found that our overall results

are not sensitive to this issue. For example, column 8 of Table 6 in the text shows that the changes in transfer programs accounted for about 14.5 percent of the increase in the number of poor male households and 24.0 percent in the number of poor female households between 1978 and 1982. Between 1980 and 1983, the corresponding percentages are 17.3 and 29.9. Given the high computational costs, we did not reestimate the econometric model.

[8]In fact, the Tax Reform Act of 1984 made several policy changes, not sought by the administration, which will raise somewhat the incomes of many poor female household heads. First, welfare recipients who receive child support payments may keep the first $50 per month. Current law allows no such income disregard. Second, the maximum earned income tax credit is increased from $500 to $550 and the eligibility ceiling is raised from $10,000 to $11,000 beginning in 1985. Third, the OBRA changes of 1981 raised the AFDC benefit reduction rate to 100 percent after four months of work. The 1984 act introduced a $30 per month disregard for months five through twelve.

[9]The other results are available on request. Because of high computational costs we did not estimate these models for male-headed households or any models reflecting the specifications of equations (8) and (11).

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