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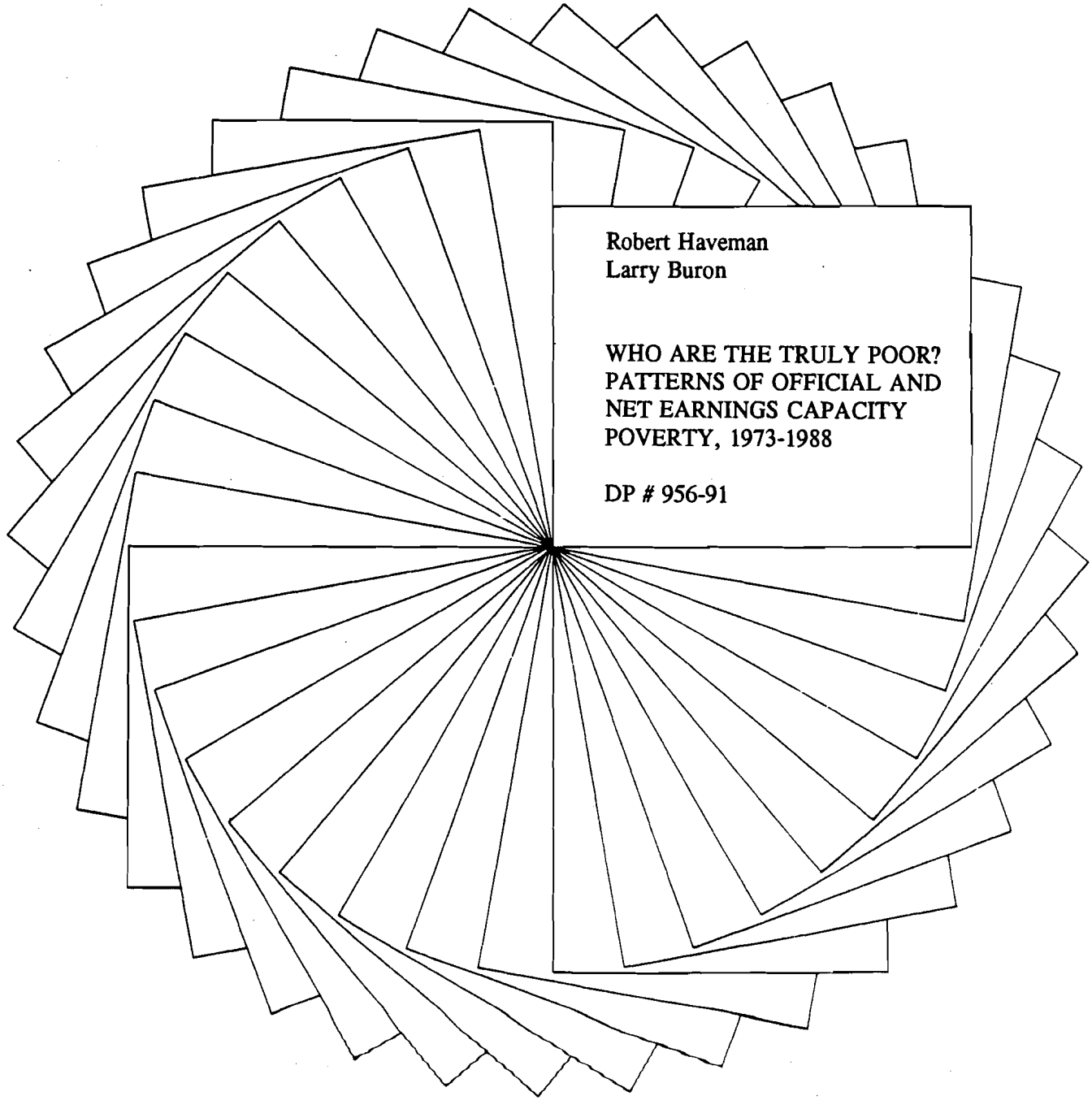

Robert Haveman
Larry Buron

WHO ARE THE TRULY POOR?
PATTERNS OF OFFICIAL AND
NET EARNINGS CAPACITY
POVERTY, 1973-1988

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Who Are the Truly Poor? Patterns of Official and Net Earnings Capacity Poverty, 1973-1988

Robert Haveman
Department of Economics
La Follette Institute of Public Affairs
Institute for Research on Poverty
University of Wisconsin-Madison

Larry Buron
Department of Economics
University of Wisconsin-Madison

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I. INTRODUCTION

In this paper we study changes in the prevalence and composition of poverty in the United States over the 1973-1988 period, focusing on the first and last years. Over this period, official poverty rose from 23.6 million people (11.4 percent of the population) to 31.9 million (13.1 percent), passing over a peak in the recession of 1981-1983 of over 15 percent of the population.[1]

The official definition of poverty in the United States compares the total income of families to an officially designated "poverty line" that varies with the size and composition of the family. If the income of a family falls below its poverty line, then that family is said to be poor. Total poverty in the nation is the sum of the individuals living in families whose income falls below their poverty line.

For a large number of reasons, the official U.S. definition and measurement of poverty have been widely criticized. Based on current cash income, the measure fails to reflect the recipient value of either in-kind transfers (e.g., food stamps and Medicaid) or taxes paid. Similarly, the official poverty measure inadequately reflects assets held by individuals and the value of leisure time. Furthermore, the designation of the particular dollar line taken to reflect "poverty" has been criticized as lacking a sound conceptual basis, and hence as being arbitrary. Adjustments in the poverty line to account for different family sizes and structures have also been criticized on similar grounds. Finally, the data base on which the official poverty measure rests has been faulted for failing to accurately capture true cash income (especially those components deriving from public transfers, income from assets, and illegal activities; see Rector, O'Beirne, and McLaughlin, 1990; Ruggles, 1990).

One of the most persistent and fundamental criticisms of the official definition is that it relies on a single year of cash income of a family. For many families, annual income is a fluctuating figure. Unemployment, layoffs, income flows from self-employment, the decision to undertake mid-

career training or to change jobs, or health considerations may all cause the money income of a household to change substantially from one year to the next. A second fundamental problem with the official definition is its heavy dependence on tastes--in particular, the tastes of the members of the household unit for income versus leisure. Holding all other considerations constant, a household with strong preferences for leisure (relative to income) is more likely to be counted as officially poor than is a family with weaker tastes for leisure. For example, a two-parent family choosing to keep a parent at home will have a higher chance of being counted as poor than a similar family in which both husband and wife choose to work.

Both theoretical and empirical work in economics have recognized these limitations of money income as a measure of economic well-being. Many studies have relied on the average of a number of years of a household's income in order to gain a better estimate of "normal" income--income purged of its transitory elements. Others have taken observed, annual consumption to be a better estimate of real economic well-being than annual income (e.g., Mayer and Jencks, 1991). Consistent with the multiyear perspective, early work by Ando and Modigliani (1963) emphasized a life-cycle perspective. They argued for a measure based on a household's optimal level of real consumption in a period, given the presence of the unit's total resources over its remaining lifetime. Becker's (1965) concept of "full income" extends this concept still further, and includes the time available to the household to be allocated to either work or leisure. A further refinement of this full-income measure would adjust for differences in the size and composition of the consumption unit, arriving at a concept of potential real consumption per equivalent consumer unit. Such a concept forms a definition of economic welfare or economic position which rests on economic theory and which reflects a more comprehensive set of considerations than one year of cash income (Moon and Smolensky, 1977).

Here we set forth an empirically tractable measure of economic position--Net Earnings Capacity--which seeks to reflect such potential real consumption. This measure abstracts from

transitory events and phenomena, unlike current cash income. It also abstracts from individual tastes for income relative to leisure, again differing from the current income measure. And, it reflects the potential of the consumer unit to generate real consumption. Finally, it adjusts for the size and composition of the family unit. Net Earnings Capacity is designed to measure the potential of a family to generate an income stream (which can then be used to support its members) were it to use its human and physical capital to capacity. Individuals living in those households with the lowest levels of Net Earnings Capacity relative to their needs are considered to be the nation's "truly poor" (Garfinkel and Haveman, 1977).

In the next section of the paper, we define the concept of Net Earnings Capacity more rigorously, and discuss the empirical techniques that we use in measuring it. Section III presents our empirical estimates of the prevalence and composition of Net Earnings Capacity poverty over the 1973-1988 period. We contrast the nation's "truly poor" families with those families designated as the nation's "official poor." In Section IV, we estimate the probability that a variety of prototypical families--families with particular constellations of characteristics--will be either officially poor or Net Earnings Capacity poor. Changes in these probabilities over time will indicate both changes in the underlying character of true poverty in the United States and the extent to which the standard poverty measure conveys an inaccurate picture of the true patterns of low economic position. In the final section, we summarize our findings and indicate some of their policy implications.

II. EARNINGS CAPACITY POVERTY: CONCEPT AND MEASUREMENT

In estimating Net Earnings Capacity for individual families, we rely on the microdata from the public use files of the March Current Population Survey (CPS) of the U.S. Bureau of the Census. This annual survey, which covers some 55,000 households each year in a rotating panel, serves as the basis for the official U.S. measure of poverty and for the annual statistics on income distribution,

earnings, income, and labor force patterns. When appropriately weighted, the CPS yields a reliable picture of the demographic and economic structure of the U.S. population in each year. We employ the CPS surveys from March 1974 (for income year 1973) and from March 1989 (for income year 1988).

Our estimates of the Net Earnings Capacity of families in the CPS are constructed from estimates of the earnings capacities of the head and (if present) the spouse of the family. In particular, we define family Gross Earnings Capacity (GEC_F) as the earnings capacity of the head (EC_H) plus the earnings capacity of the spouse (EC_S) plus property income (μ). That is:

$$GEC_F = EC_H + EC_S + \mu.$$

To estimate the earnings capacities of the head and spouse, we fit an identical two-equation model for four race-gender categories in both 1973 and 1988.[2] The use of separate race-gender groups presumes that the structure of the labor markets in which these race-gender groups sell labor services differs across the groups. Discrimination against racial minorities and women is one factor that justifies the presumption of such differences in structure.

In the first equation, the correlates of the labor force participation of adults of each race-gender category are estimated for 1973 and 1988 using a reduced-form probit specification. Individuals are assigned a value of 1 if they have positive log earnings in the year; 0 otherwise. The independent variables include variables that affect the expected market wage (e.g., education and age), the incentive to work (e.g., nonlabor income and AFDC benefits), and labor market conditions (e.g., unemployment rate). Estimates from the first-stage probit equations are used to construct the Heckman selectivity correction term (λ) for each individual. λ is used in a second-stage earnings equation to correct for the bias in estimating an earnings equation using data only on individuals who have selected into the work force.

The second-stage earnings equation is fit over those individuals with positive earnings, and the dependent variable is defined as the logarithm of observed earnings (LOGEARN). The independent variables in this equation were chosen using the human capital model as a guide, and include education, age, region of the country, rural-suburban-urban location, marital status, number of children and their ages, hours worked in the year, health status indicators, and the estimated λ term.

The coefficient estimates from the eight race-gender equations for each year are shown in Appendixes A through D; a description of the variables used in these estimates is presented in Appendix E. The estimated results conform to the expectations of the human capital model. Changes in the estimated coefficients over the years reflect changes in labor supply, labor demand, and the structure of the labor market over time.

To obtain the estimated earnings capacity for a person (EC), we employ coefficients from the appropriate LOGEARN equation and the person's family and individual characteristics. Because we define individual earnings capacity to be the earnings that the person would be expected to receive if he/she worked full-time, full year, the hours worked variable is set at 2,000 hours (50 weeks x 40 hours). By adopting this procedure, each individual with the same set of characteristics is assigned the same value of EC.[3]

The concept of earnings capacity presumes that individuals are fully utilizing their ability to earn income at capacity, i.e., that they work full-time, full year. However, individuals are constrained from utilizing their EC at capacity for several reasons. For example, health limitations, disabling conditions, or involuntary unemployment due to insufficient aggregate demand restrict the total number of hours that an individual is able to work. To take account of such exogenous limitations on the use of earnings capacity, we adjust the estimated EC values by a factor which reflects the time that each individual loses in a year because of health limitations, disabling conditions, or involuntary unemployment. This factor is defined as:

$$\Gamma = (50 - WC)/50$$

where WC is reported weeks constrained from working because of sickness, disability, or unemployment.[4] In summary:

$$\hat{EC} = \exp(\text{pred. LOGEARN at 2,000 hours}) \times \Gamma$$

To obtain the gross earnings capacity of a family (GEC), we sum the $\hat{EC}$ of the head and the spouse (if present), and add the value of observed property income (that is, interest, dividends, rents, alimony, and miscellaneous other property-related income sources).[5] Note that the value of public transfer payments are excluded from GEC, whereas they are included in the current income figure on which the official poverty definition is based.

Our GEC estimate neglects the costs which must be borne by a family to attain the full use of earnings capacity. Some of these costs may be specific to particular jobs, and therefore reflected in the market wage rate. Others, however, result from the obstacles to full-time, full-year work for both the head and spouse which are inherent in the structure or location of families, in combination with socially established standards for overcoming these obstacles. The most prominent of these obstacles is the presence of young children, for whom care requirements may impede the ability of single parents or spouses to work at capacity. Families can overcome this obstacle by arranging--and paying--for socially acceptable child care for young children.

To reflect the costs of overcoming this child-related obstacle to the full use of earnings capacity, we subtract from each family GEC estimate the amount required to purchase acceptable child care.[6] We assume the cost of child care to be $1.50 per hour in 1988, and that each child less than six years of age requires 2,000 hours of child care per year.[7] Hence,

$$NEC = GEC - (\$3{,}000 \times \text{number of children less than six})$$

In the analyses of earnings capacity poverty that follow, the estimate of family NEC is divided by the poverty line for the family, and families are then ranked from highest to lowest by the resulting "Net Earnings Capacity welfare ratio." Families at the bottom of the "NEC welfare ratio" distribution are the earnings capacity poor--those families least capable of earning sufficient income to lift the family above the poverty line. We take these families to be the nation's truly poor.

III. POVERTY COMPOSITION AND PREVALENCE, 1973-1988

The official poverty rate, indicating the prevalence of income poverty in the United States, has fluctuated over the 1973-1988 period from about 11 to 15 percent for the entire population. In the population with family heads under age 65--which we use for our analyses--current income poverty has fluctuated a little more widely, from about 10.5 to 15.5 percent of the population. The official current-income-based poverty rates for individuals in families with nonaged heads in the first, middle, and last year of our study are: 1973, 10.5 percent; 1980, 12.8 percent; 1988, 13.3 percent.

In this section, we compare the composition and prevalence of poverty in the United States (and the changes in composition and prevalence) using two definitions of economic well-being--current money income (the basis of the official definition of poverty) and Net Earnings Capacity (as defined in Section II). For both the beginning and ending years of the 1973 to 1988 period we identify the 13.3 percent of individuals in families with the lowest ratio of current money income to the poverty line. We also identify the 13.3 percent of families in both of the years with the lowest ratio of Net Earnings Capacity to the poverty line.[8] Finally, we compare the composition and prevalence rates of the alternative poverty populations.

Table 1 presents basic information on poverty composition, and Table 2 presents information on poverty incidence, for 1973 and 1988. Appendix F combines the information in these two tables while adding more detail.

Poverty Composition and Poverty Incidence--CY vs. NEC

Perusal of Tables 1 and 2 reveals substantial differences in the extent to which individuals with various selected characteristics are concentrated in the two poverty populations--CY and NEC--and in the incidence of CY and NEC poverty among these groups. Taking the NEC measure to be the superior indicator of true poverty status, the official poverty measure is seen to understate the incidence of (and the concentration within) poverty of blacks, Hispanics, those living in very large families, those in families headed by a person with a very low level of schooling, and those living in families headed by a female.

Conversely, official statistics overstate the incidence of (and concentration within) poverty of those living in families headed by a young person, single individuals, and those living in intact (husband/wife) families.

Hence, relying on the official definition of poverty creates the impression that those groups commonly viewed as the nation's most vulnerable populations--racial minorities, female heads, and the unschooled--are less concentrated in the poverty population (and have a lower incidence of poverty) than is in fact the case. Stated alternatively, the poverty problem for these vulnerable groups is substantially more serious than is indicated in the official statistics.

A few examples taken from Table 2 make this conclusion clear. For the most recent year, 1988, the official statistics indicate that about 32 percent of blacks are in poverty; however, nearly 37 percent of blacks are in NEC poverty. For those living in families headed by nonwhite females with children under 18 in 1988, the comparable incidence rates are 63 percent (official) and 76 percent (NEC). While official statistics indicate a poverty rate of 35 percent for those living in families headed by a person with less than nine years of schooling, the NEC rate is 39 percent. The incidence gap between the two poverty measures is the most stark in the case of those living in very

TABLE 1

Composition of Individuals in Current Income (CY) and Net Earnings Capacity (NEC) Poverty by Selected Characteristics of the Family Head, 1973-1988 (Head aged less than 65 years)

	Percentage of Poverty Population with Indicated Characteristic				Percentage of National Population with Indicated Characteristic	
	1973		1988		1973	1988
Characteristic	CY	NEC	CY	NEC	% Pop.	% Pop.
Black	32.4	39.9	29.8	34.4	11.4	12.4
Hispanic	12.5	14.7	17.9	19.3	5.5	8.9
Head aged 16-21	6.8	3.8	6.8	5.1	2.6	2.0
Head aged 61-64	5.8	4.5	4.7	5.5	5.0	5.3
Educ. < 9 years	35.7	40.0	21.5	24.1	16.8	8.1
One-person unit	11.6	3.1	16.8	8.3	6.3	11.8
Family size > 8	9.0	13.8	2.9	5.2	2.8	1.0
White female head with children < 18	12.8	24.4	13.9	19.5	4.2	4.9
Nonwhite female head with children < 18	20.5	26.4	24.6	29.9	3.8	5.2
Female head without children < 18	10.7	11.3	13.9	14.3	5.4	9.0
Male head without children < 18	5.5	2.2	9.4	6.7	4.2	8.2
Husband-wife families	49.8	34.0	36.0	26.2	81.7	71.1

Source: Calculations by authors from the 1974 and 1988 March CPS.

TABLE 2

Incidence of Current Income (CY) and Net Earnings Capacity (NEC) Poverty by Selected Characteristics of the Family Head, 1973-1988 (Head aged less than 65 years)

Characteristic	1973		1988	
	CY	NEC	CY	NEC
Black	37.8	46.4	31.9	36.5
Hispanic	30.1	35.1	26.8	28.7
Head aged 16-21	35.3	19.8	44.6	33.0
Head aged 61-64	15.6	12.1	11.9	13.7
Educ. < 9 years	28.3	31.3	35.3	39.3
One-person unit	24.7	6.6	18.9	9.3
Family size > 8	42.4	64.3	39.6	70.1
White female head with children < 18	39.8	67.5	37.7	52.4
Nonwhite female head with children < 18	72.6	88.6	63.1	76.0
Female head without children < 18	26.5	27.8	20.4	18.9
Male head without children < 18	17.3	6.9	15.2	10.7
Husband-wife families	8.1	5.5	6.7	4.9

Source: Calculation by authors from the 1974 and 1988 March CPS.

large families--official statistics record a poverty rate for this group of 40 percent; the NEC poverty incidence rate is over 70 percent.

Changes in Poverty Incidence, 1973-1988--CY vs. NEC

The two poverty definitions also convey quite different pictures of **changes over time** in the extent to which various population groups have escaped (or fallen into) poverty over the past two decades. As Table 2 indicates, official statistics show that racial minorities have experienced 11 to 16 percent decreases in their poverty rate; in fact, NEC poverty rates have fallen by a more substantial 18 to 22 percent for blacks and Hispanics. For families headed by a person aged 61 to 64 and one-person "families," the two measures of economic well-being have gone in different directions. While the CY poverty rate has fallen over time for these groups, the NEC poverty rate has actually increased. Families headed by either white or nonwhite single mothers have seen their CY and NEC poverty rates decline from 1973 to 1988; however, the patterns for each of these families were different. Among families headed by nonwhite single mothers, CY and NEC poverty incidence dropped by the same proportion; for individuals in families headed by white single mothers, the CY rate dropped slightly while the NEC rate dropped by 22 percent.

IV. OFFICIAL AND NEC POVERTY PROBABILITIES FOR PROTOTYPICAL FAMILIES

While Tables 1 and 2 present an overview of poverty rates and composition among various demographic and economic groups under the two definitions, it is difficult to discern from their data which family characteristics are the most important determinants of poverty status in each case. In this section, we identify 10 family types--ranging from large intact families to single individuals--and calculate poverty rates for each of them using both the current income and the Net Earnings Capacity definitions of economic position. We do this for both 1973 and 1988. The poverty rate calculations are predictions from empirically fitted functions which measure the independent contribution of a

wide variety of characteristics to poverty status. The coefficient estimates from the probit regressions used to obtain these predictions are presented in Appendixes G and H.[9]

Table 3 presents the predicted probability that each of the 10 prototypical families will be poor by the CY and the NEC indicators of economic position. The prototypical families chosen include those nonaged family types which figure most prominently in discussions of poverty and poverty policy. The constellation of characteristics defining each of these families is described in Appendix I. The predicted probabilities are estimated by simulations in which the specified values of the various sets of characteristics are introduced into the estimated probit equations.

Irrespective of the year (1973, 1988) or the measure of economic status (CY, NEC), four of the prototypical families have a very high probability of being poor--the black AFDC stereotype, the large black rural family, the black low-education family, and the ghetto youth. For these family types, there is no predicted poverty rate that falls below 27 percent.

The families with the lowest probability of being poor are the blue-collar family and the suburban black family. Probabilities recorded for these families do not exceed 5 percent.

For four of the prototypical households, substantial differences are recorded in the probability of being counted as poor by the two measures. For the midwestern farm family, the white low-education family, and the independent student, the NEC poverty rate is below the national average, while the CY poverty rate is substantially above the average. The CY poverty rate is at least three times that of the NEC measure for all of these groups. Indeed, the average NEC poverty rate for these family types (averaged over types and years) is 6.5 percent; the average CY rate is 43 percent. For each of these family types, the high levels of CY poverty appear to be more a matter of "choice" than of "circumstance" or "capabilities."[10]

TABLE 3

Probability that Various Family Types Are Net Earnings Capacity (NEC) and Current Income (CY) Poor, 1973 and 1988

Characteristic	1973		1988	
	CY	NEC	CY	NEC
Intact rural families				
Midwestern farm family	.28	.05	.36	.12
Rural black family	.90	.96	.91	.86
Non-rural intact families				
Blue-collar family	.01	.00	.05	.01
Suburban black family	.05	.01	.05	.01
White low-education family	.29	.06	.39	.12
Black low-education family	.52	.40	.52	.27
Single mothers				
AFDC stereotype	.93	.99	.97	.98
Suburban single mother	.08	.82	.17	.68
Single males				
Ghetto youth	.88	.65	.85	.60
Independent student	.70	.01	.57	.04

Source: Calculations based on probit estimates in Appendixes G and H, which in turn are based on data from the 1974 and 1988 March CPS.

In only one case--that of the suburban single mother--is the NEC poverty rate greater than the national average while the CY rate is lower. Using the official poverty definition, a relatively low poverty rate is estimated for this family type--an average of 12.5 percent. However, the average NEC poverty rate is 75 percent. In this case, the official, CY-based poverty measure implies a far less serious problem of low economic position than does the NEC measure.

Changes in CY Poverty Rates--1973-1988

Table 4 summarizes the patterns of change from 1973 to 1988 in predicted CY and NEC poverty rates for those prototypical family types for which NEC poverty is judged to be a serious problem.[11] The percentage-point changes summarized in the table are calculated from Table 3.

The patterns of change observed in Table 4 vary substantially over the prototypical household types. A few deserve to be noted:

- For all the families with children (the first six types), the official CY poverty rate either increased over the period or remained constant. Both of the mother-only family types increased their CY poverty rates over the period by at least four percentage points from an already high base. Conversely, the CY poverty rates for ghetto youth decreased over the period.

- A quite different pattern of changed poverty incidence is shown using the NEC measure. All of the categories except the two intact white families (the midwestern farm and low-education families) showed decreases in their NEC poverty rates. The largest reductions are for the two black intact families and the suburban single-mother family, where poverty rate decreases of at least 10 percentage points are recorded.

TABLE 4

Percentage-Point Changes in the Probability of Being Poor, CY and NEC Measures of Economic Status, from 1973 to 1988

Characteristic	Current Income 1973-1988	Net Earnings Capacity 1973-1988
Midwestern farm family	+ 8	+ 7
Rural black family	+ 1	-10
White low-education family	+10	+ 6
Black low-education family	0	-13
AFDC stereotype	+ 4	- 1
Suburban single mother	+ 9	-14
Ghetto youth	- 3	- 5

V. SUMMARY AND POLICY IMPLICATIONS

The estimates presented above have important implications for both the measurement of poverty and for public policies toward the poor. Table 5 summarizes some of the important patterns revealed in our estimates, and sketches out a few of their implications.

Official U.S. poverty statistics, released annually by the Census Bureau, are the nation's official antipoverty report card, indicating the success made in combating poverty. The results of this report card carry substantial weight. Political leaders rely on it for evidence of the success or failure of the policies that have been put in place and of the need for additional resources or altered strategies.

An important implication of our research is that the official measure is a weak reed on which to rest assessments of the nation's progress against poverty, resting as it does on recorded cash income. A superior measure of poverty status, we argue, would rest on an assessment of the capabilities of individuals and families, rather than on their observed outcomes. Our Net Earnings Capacity measure is such an indicator.

Overall, we find that only about 40 to 50 percent of the CY poor are indeed poor in terms of their ability to be independent and self-sustaining. Hence, for some of our 10 prototypical groups, we find that the official measure seriously overstates the incidence of poverty (e.g., the independent student and intact white families). For others, the incidence of true poverty is severely understated by the official measure (e.g., the suburban single mother). For these groups, already perceived to be among the nation's most vulnerable, their economic plight is even more severe than is conveyed by the official poverty statistics.

For example, consider family types for which the poverty rate averages 30 percent or more over the two years. The NEC and CY measures agree that four of the family types are in this high poverty category--the rural black family, the black low-education family, the AFDC stereotype, and

TABLE 5

Summary of Poverty Patterns and Changes in Poverty Incidence, 1973-1988, and Their Policy Implications

Family	Accuracy of Official Poverty Measure	Poverty Status	Change in Poverty Status	Policy Implications
Midwestern farm family	Seriously overstates poverty	CY-high NEC-low	CY-increased poverty NEC-increased poverty	Little NEC poverty problem
Rural black family	Relatively accurate	CY and NEC poverty very high	CY-increased poverty NEC-increased poverty	Very low income and earnings capacity; target for policy action
Blue-collar family	Substantially overstates poverty	CY and NEC poverty very low	CY-small increase NEC-small increase	Little poverty policy concern
Suburban black family	Substantially overstates poverty	CY and NEC poverty very low	CY-no change NEC-no change	Little poverty policy concern
White low-education family	Seriously overstates poverty	CY-high NEC-below average	CY-sizable increase NEC-sizable increase	Increase in CY and NEC poverty troublesome
Black low-edcuation family	Substantially overstates poverty	CY and NEC poverty very high	CY-no change NEC-substantial decrease	High NEC poverty, but decrease is encouraging
AFDC stereotype	Slightly overstates poverty	CY and NEC poverty extremely high	CY-some increase NEC-small decrease	NEC poverty very severe, and stable
Suburban single mother	Dramatically understates poverty	CY-about average NEC-very high	CY-substantial increase NEC-substantial decrease	NEC and CY poverty very high, but decrease in NEC rate encouraging
Ghetto youth	Substantially overstates poverty	CY and NEC poverty very high	CY and NEC small decrease	Serious CY and NEC poverty problem
Independent student	Dramatically overstates poverty	CY-very high NEC-very low	CY-substantial decrease NEC-very small	No poverty problem, in spite of CY measure increase

ghetto youth. However, the official measure would also include three other family types in this seriously vulnerable category--the midwestern farm family, the independent student, and the low-education white family. It would fail to include the suburban single-mother family, which records one of the highest NEC poverty rates.

Similarly, for some groups (e.g., the black low-education family, the blue-collar family, and the suburban single mother) the time trend in official poverty is quite different from the trend in the NEC measure.

These comparisons suggest that a new definition of national poverty is in order, one which would attend to the longer-term capabilities of individuals and families, rather than to their current cash income. Perhaps a National Commission composed of poverty researchers, statisticians, and policymakers should be organized for the purpose of devising a poverty measure that can reliably identify those among us who are truly at the bottom of the distribution of economic capabilities.

On the basis of the NEC estimates, a number of family types are seen to have shockingly high poverty and vulnerability problems. They, together with their average NEC poverty rates, are as follows:

- the rural black family (91 percent)
- the black low-education family (34 percent)
- the AFDC stereotype (99 percent)
- the suburban single mother (75 percent)
- the ghetto youth (63 percent)

These family types would seem to be prime candidates for focused social policy efforts. Note that four of the five groups are black and three of the five are headed by a black male. Two of the five are single parents. All of these groups have shown some progress in reducing the incidence of NEC poverty over the past two decades.

Are there any policy directions that would seem to follow from this evidence regarding who are in fact the truly poor? Because these truly poor families are of working age, two sorts of policy measures would seem to be in order: (1) policies designed to increase the earnings capacities of these groups, and (2) policies designed to enable them to more fully utilize the capacities that they do possess. The goal would be to move these truly poor and vulnerable families toward economic independence through the exercise of their own earnings abilities.

Some of the following strategies would seem to be particularly interesting measures for experimentation and testing:[12]

- Earnings (or wage rate) subsidies for those with low earnings capacities (that is, low wage rates) could be targeted on both the supply and demand side of the labor market, generating increased work effort and take-home pay for those with the fewest skills and capacities.

- Effectively implemented affirmative action programs could reduce the effect of labor market (or wage rate) discrimination among racial and gender minorities.

- Education-training efforts targeted on those with few skills or little education could effectively benefit those at the very bottom of the distribution of earnings capacities.

- Child care subsidies could enable additional adults in large families or additional single mothers to enter the work force and increase the utilization of their earnings capacities.

- Child support enforcement--or the adoption of a new child support system (involving the mandatory withholding of child support payments from absent fathers together with an assured benefit arrangement)--would offset to some extent the low earnings capacities of mother-only families, and would enable single mothers to increase the utilization of their earnings capacities.

APPENDIX A

Probit Estimates of Determinants of Labor Force Participation[a] in 1973

Variable	White Males (n = 30,407)		Nonwhite Males (n= 4,538)		White Females (n = 35,025)		Nonwhite Females (n = 6,098)	
	Coefficient	T-Ratio	Coefficient	T-Ratio	Coefficient	T-Ratio	Coefficient	T-Ratio
ED	-0.026	-1.17	-0.020	-0.44	0.101	5.09	0.068	2.29
EDSQ	0.001	0.17	-0.001	-0.54	0.001	1.04	0.003	2.87
AGE	0.060	10.55	0.109	6.34	0.031	6.39	0.074	6.66
AGESQ	0.009	-19.06	-0.001	-8.97	-0.001	-13.36	-0.001	-7.91
AGESCH	0.00	5.03	0.001	1.33	-0.001	-3.82	-0.001	-3.17
NORTHEAST	-0.108	-2.92	0.053	0.48	-0.037	-1.45	-0.221	-3.20
SOUTH	-0.211	-6.10	-0.068	-0.81	-0.040	-1.64	0.151	2.76
WEST	-0.270	-5.53	-0.246	-1.90	-0.013	-0.38	-0.114	-1.35
SUB	-0.023	-0.90	-0.012	-0.18	-0.045	-2.52	-0.127	-2..27
CITY	-0.057	-2.04	-0.020	-0.27	-0.028	-1.41	-0.180	-3.71
MARRIED	0.101	3.18	0.158	2.26	--	--	--	--
SNC	--	--	--	--	0.694	18.53	0.400	5.05
SWC	--	--	--	--	0.334	9.01	0.066	1.17
MNC	--	--	--	--	0.132	4.74	-0.085	-1.33
TOT	--	--	--	--	-0.682	-27.73	-0.376	-7.20
NUMKID	0.005	0.53	0.011	0.53	-0.100	-10.95	-0.086	-5.85
NONLAB	0.006	-3.12	0.008	1.17	-0.022	-21.633	-0.027	-4.73
SCHOOLLW	-0.580	-6.57	-1.198	-7.56	-0.584	-6.714	-0.589	-3.52
OLD	-0.840	-18.74	-0.341	-2.60	-0.615	-14.30	-0.416	-3.60
HEALTHPG	-0.802	-25.934	-1.179	-16.49	-0.544	-13.24	-0.914	-14.09
WELFGEN	0.001	3.02	-0.001	-1.76	0.001	0.26	-0.001	-0.17
UE	-0.037	-2.12	0.043	0.87	-0.019	-1.52	0.001	0.04
ONE	0.810	3.35	-0.088	-0.16	-0.271	-1.40	-1.078	-3.09

Source: Estimates based on data from March CPS.

[a]Dependent variable equals one if individual reported earnings > 1 in 1973.

APPENDIX B

Probit Estimates of Determinants of Labor Force Participation[a] in 1988

Variable	White Males (n = 34,527)		Nonwhite Males (n = 7,869)		White Females (n = 39,616)		Nonwhite Females (n = 10,189)	
	Coefficient	T-Ratio	Coefficient	T-Ratio	Coefficient	T-Ratio	Coefficient	T-Ratio
ED	0.038	1.74	-0.064	-2.41	0.206	9.78	0.636	2.86
EDSQ	0.001	1.15	0.002	2.24	-0.001	-1.34	0.004	5.52
AGE	0.071	12.68	0.068	6.39	0.077	16.16	0.106	12.15
AGESQ	-0.001	-21.47	-0.001	-10.56	-0.001	-22.72	-0.001	-13.59
AGESCH	0.00	-0.31	0.001	2.67	-0.002	-7.56	-0.001	-4.78
NORTHEAST	0.034	1.07	0.155	2.03	-0.139	-5.72	-0.150	-2.70
SOUTH	-0.166	-5.57	0.022	0.34	-0.116	-4.95	0.072	1.51
WEST	-0.186	-6.24	0.226	3.46	-0.034	-1.44	0.181	3.56
SUB	0.025	1.11	0.147	2.74	0.005	0.28	-0.047	-1.18
CITY	-0.063	-2.26	0.086	1.84	-0.011	-0.47	-0.059	-1.68
MARRIED	-0.009	-0.34	0.061	1.26	--	--	--	--
SNC	--	--	--	--	0.267	7.11	0.040	0.65
SWC	--	--	--	--	0.129	3.75	-0.129	-3.01
MNC	--	--	--	--	-0.783	-2.42	-0.200	-3.57
TOT	--	--	--	--	-0.516	-19.66	-0.292	-6.89
NUMKID	0.003	-0.23	-0.040	-2.16	-0.167	-13.23	-0.142	-8.23
NONLAB	0.003	4.25	0.005	2.89	-0.006	-15.84	0.003	-3.64
SCHOOLLW	-0.937	-13.31	-1.217	-11.37	-0.822	-14.58	-0.683	-8.37
OLD	-0.536	-12.91	-0.397	-3.95	-0.422	-10.60	-0.246	-2.70
HEALTHPG	-0.997	-30.98	-1.313	-21.19	-0.818	-21.15	-0.852	-13.99
WELFGEN	-0.001	-2.91	-0.001	-4.99	-0.001	-1.35	-0.004	-3.33
UE	-0.016	-2.38	-0.041	-3.14	-0.050	-9.70	-0.072	-7.30
ONE	0.329	1.41	1.051	3.16	-1.335	-6.60	-1.251	-4.58

Source: Estimate based on data from March CPS.

[a]Dependent variable equals one if individual reported earnings > 1 in 1988.

APPENDIX C

Least Squares Estimates of Semilogorithmic Yearly Earnings Equations for 1973

Variable	White Males (n = 25,255)		Nonwhite Males (n = 3,759)		White Females (n = 17,138)		Nonwhite Females (n = 3,347)	
	Coefficient	T-Ratio	Coefficient	T-Ratio	Coefficient	T-Ratio	Coefficient	T-Ratio
ED	0.006	0.72	0.016	1.03	-0.033	-1.92	-0.065	-3.05
EDSQ	0.001	3.49	0.002	4.27	0.004	6.89	0.006	8.22
AGE	0.050	18.84	0.057	8.07	0.040	10.25	0.040	4.45
AGESQ	-0.001	-18.86	-0.001	-7.90	-0.001	-11.71	-0.001	-5.87
AGESCH	0.001	6.02	0.00	-0.99	0.00	1.30	0.00	1.12
NORTHEAST	0.017	1.70	0.005	0.17	0.060	3.90	0.115	3.08
SOUTH	-0.023	-2.28	-0.075	-2.94	0.012	0.77	-0.191	-6.35
WEST	0.034	3.01	0.109	3.89	0.00	-0.01	0.001	0.02
SUB	0.219	24.96	0.310	10.52	0.186	13.03	0.242	6.65
CITY	0.160	15.83	0.290	11.05	0.192	12.63	0.243	7.70
MARRIED	0.171	13.66	0.120	4.38	--	--	--	--
SNC	--	--	--	--	0.093	3.12	-0.074	-1.53
SWC	--	--	--	--	0.035	1.35	-0.072	-2.23
MNC	--	--	--	--	0.035	1.63	-0.044	-1.09
NUMKID	0.025	7.91	0.010	1.56	-0.040	-4.56	-0.018	-1.52
LOG HOURS	0.974	108.41	0.947	46.06	1.156	157.10	1.103	73.08
HEALTHPT	-0.193	-2.38	-0.416	-2.74	-0.085	-0.68	-0.102	-0.72
HEALTHPY	-0.010	-0.51	-0.030	-0.70	0.083	2.84	-0.027	-0.60
ONE	0.100	0.90	-0.101	-0.42	-1.313	-7.66	-0.756	-2.60
LAMBDA	-0.392	-11.90	-0.408	-6.33	-0.007	-0.21	-0.077	-1.03
R-squared	.532		.584		.651		.713	

Source: Estimates based on data from March CPS.

APPENDIX D

Least Squares Estimates of Semilogarithmic Yearly Earnings Equations for 1988

Variable	White Males (n = 27,086)		Nonwhite Males (n = 6,181)		White Females (n = 24,092)		Nonwhite Females (n = 6,112)	
	Coefficient	T-Ratio	Coefficient	T-Ratio	Coefficient	T-Ratio	Coefficient	T-Ratio
ED	0.050	4.38	0.006	0.50	0.093	6.47	-0.061	-4.13
EDSQ	0.001	2.22	0.003	6.36	0.001	2.09	0.005	11.31
AGE	0.055	18.53	0.055	10.15	0.064	18.82	0.039	6.10
AGESQ	-0.001	-13.44	-0.001	-8.58	-0.001	-17.50	-0.001	-6.90
AGESCH	0.00	-0.82	0.00	0.69	-0.001	-3.03	0.001	3.10
NORTHEAST	0.126	11.29	0.015	0.52	0.171	14.40	0.155	5.48
SOUTH	0.014	1.34	-0.167	-6.58	0.055	4.90	-0.038	-1.54
WEST	0.034	2.80	-0.037	-1.39	0.046	3.67	0.042	1.59
SUB	0.208	23.32	0.137	6.42	0.206	21.80	0.151	7.36
CITY	0.138	12.01	0.047	2.46	0.173	14.40	0.140	7.42
MARRIED	0.143	13.21	0.100	4.90	--	--	--	--
SNC	--	--	--	--	0.016	0.84	-0.014	-0.39
SWC	--	--	--	--	-0.019	-1.14	-0.070	-3.30
MNC	--	--	--	--	-0.049	-2.89	-0.065	-2.20
NUMKID	0.020	4.68	0.003	0.36	-0.078	-9.61	-0.031	-2.66
LOG HOURS	0.918	131.06	1.049	75.71	1.040	210.49	1.070	112.62
HEALTHPT	-0.186	-1.48	-0.395	-2.09	-0.111	-1.23	0.071	0.41
HEALTHPY	-0.001	-0.04	0.011	0.24	-0.040	-1.51	0.033	0.75
ONE	0.670	5.53	0.003	-0.02	-1.023	-6.99	0.205	0.98
LAMBDA	-0.367	-10.95	-0.037	-0.66	0.167	5.15	0.060	1.02
R-squared	.555		.617		.716		.751	

Source: Estimates based on data from March CPS.

APPENDIX E

Alphabetical Listing of Variable Definitions

AGE - Age in single years.

AGESCH - Age times number of years of schooling completed.

AGESQ - Age squared.

CITY - Dummy variable equal to 1 if from central city.

ED - Number of years of schooling beyond kindergarten completed.

EDSQ - Number of years of schooling beyond kindergarten completed, squared.

HEALTHPG - Dummy variable equal to 1 if person participates in disability program. Program participation:

1. Receives social security or railroad retirement benefits and
   a. is not in school, is age 19-22, and is not widowed, divorced, or separated with dependent children; or
   b. is age 23-59, and is not widowed, divorced, or separated with dependent children.
2. For 1980 and 1988, receives SSI. For 1973, receives welfare/public assistance and is not unemployed and not separated, divorced, or widowed with dependent children.
3. Receives Workers' Compensation.
4. Receives veteran disability benefits, is a veteran, and is not in school.

HEALTHPT - Dummy variable equal to 1 if person limited to part-time work for health reasons.

HEALTHPY - Dummy variable equal to 1 if person limited to part-year work for health reasons.

LAMBDA - Selectivity correction variable.

LOG HOURS - Natural log of total hours worked in the year. Total hours equals (# of weeks worked in year) X (# of hours usually worked per week). For 1973, we only have information on individual's part-time/full-time status and weeks worked category (e.g., 1-13 weeks). The mean of the person's weeks worked category is multiplied by 20 if he/she was a part-time worker and 40 if a full-time worker to get to total hours worked in 1973.

MARRIED - Dummy variable equal to 1 if person married, spouse present.

MNC - Dummy variable equal to 1 if married, no children < age 18.

MWC - Dummy variable equal to 1 if married, with children < age 18.

(Appendix continues)

APPENDIX E (continued)

NONLAB	-	Non-labor income equals family income minus individual's earnings minus family income dependent on individual's labor supply decision (in thousands of dollars).
NORTHEAST	-	Dummy variable equal to 1 if individual from Northeast region of the country.
NOTID	-	Dummy variable equal to 1 if survey doesn't identify whether individual is from city, suburb, or rural area.
NUMKID	-	The number of own, never-married children less than 18.
OLD	-	Dummy variable equal to 1 if person age 65 or older.
ONE	-	Constant, equal to 1 for everyone.
SCHOOLLW	-	Dummy variable equal to 1 if school was major activity last week.
SNC	-	Dummy variable equal to 1 if single, no children < age 18.
SOUTH	-	Dummy variable equal to 1 if from Southern region of country.
SUB	-	Dummy variable equal to 1 if from metropolitan area, but not central city.
SWC	-	Dummy variable equal to 1 if single with children < age 18.
TOT	-	Dummy variable equal to 1 if have a child < age 6.
UE	-	State unemployment rate. For 1973, individuals are only identified as being from one of 23 groups of states. The UE rate reported for them is a weighted average (by population) of the group's UE rates.
WELFGEN	-	Maximum state AFDC payment for a family of four. For 1973, individuals are only identified as being from one of 23 groups of states. The AFDC benefits reported for them is a weighted average (by population) of the group's AFDC benefits.
WEST	-	Dummy variable equal to 1 if from West region of country.

APPENDIX F

Composition and Incidence of Current Income (CY) and Net Earnings Capacity (NEC) Poverty

Characteristic	Percentage of Poverty Population with Indicated Characteristic				Percentage of National Population with Indicated Characteristics		Incidence of Poverty in Selected Groups from the National Population			
	1973		1988				1973		1988	
	CY	NEC	CY	NEC	1973	1988	CY	NEC	CY	NEC
Race of head										
White	53.4	43.8	47.1	42.2	81.8	75.3	8.7	7.1	8.3	7.4
Black	32.4	39.9	29.8	34.4	11.4	12.4	37.8	46.4	31.9	36.5
Hispanic	12.5	14.7	17.9	19.3	5.5	8.9	30.1	35.1	26.8	28.7
Other	1.7	1.6	5.2	4.1	1.3	3.4	17.6	16.1	20.2	15.8
Sex of head										
Male	56.0	38.0	47.6	36.3	86.6	80.9	8.6	5.8	7.8	5.9
Female	44.0	62.1	52.4	63.7	13.4	19.2	43.8	61.8	36.4	43.9
Family structure										
Husband-wife	49.8	34.0	36.0	26.2	81.7	71.1	8.1	5.5	6.7	4.9
Single nonwhite mom[a]	20.5	26.4	24.6	29.9	3.8	5.2	72.6	88.6	63.1	76.0
Single white mom	12.8	24.4	13.9	19.5	4.2	4.9	40.4	67.5	37.7	52.4
Single dad	.7	1.7	2.1	3.4	.7	1.5	12.5	32.8	19.0	29.7
Single male headed[b]	5.5	2.2	9.4	6.7	4.2	8.2	17.3	6.9	15.2	10.7
Single female headed[b]	10.7	11.3	13.9	14.3	5.4	9.0	26.5	27.8	20.4	20.9
Age of head										
16-21	6.8	3.8	6.8	5.1	2.6	2.0	35.3	19.8	44.6	33.0
22-30	22.7	21.0	30.2	29.0	20.2	19.6	14.9	13.7	20.5	19.5
31-40	28.4	31.4	31.8	30.7	27.3	33.4	13.8	15.2	12.7	12.1
41-50	21.4	24.9	15.2	17.2	26.6	24.8	10.7	12.4	8.2	9.2
51-60	15.0	14.3	11.3	12.6	18.4	15.0	10.8	10.3	10.1	11.1
61-64	5.8	4.5	4.7	5.5	5.0	5.3	15.6	12.1	11.9	13.7
Education of head										
0-8	35.7	40.0	21.5	24.1	16.8	8.1	28.3	31.3	35.3	39.3
9-12	52.2	54.6	62.3	65.5	53.1	49.1	13.1	13.6	16.9	17.6
13-16	10.8	5.6	14.5	10.1	22.6	32.0	6.3	3.2	6.0	4.2
17+	1.4	.2	1.7	.3	7.6	10.8	2.4	.4	2.1	.4

(Appendix continues)

APPENDIX F (continued)

Characteristic	Percentage of Poverty Population with Indicated Characteristic				Percentage of National Population with Indicated Characteristics		Incidence of Poverty in Selected Groups from the National Population			
	1973		1988				1973		1988	
	CY	NEC	CY	NEC	1973	1988	CY	NEC	CY	NEC
Family size										
1	11.6	3.1	16.8	8.3	6.3	11.8	24.7	6.6	18.9	9.3
2	11.3	8.2	14.3	12.5	15.6	18.3	9.6	6.9	10.4	9.0
3 to 4	26.7	30.4	36.7	41.2	40.5	46.9	8.8	9.9	10.4	11.6
5 to 6	27.4	26.8	23.1	25.4	26.8	19.4	13.6	13.2	15.8	17.3
7 to 8	14.0	17.7	6.3	7.4	8.0	2.6	23.4	29.3	31.5	37.0
9 +	9.0	13.8	2.9	5.2	2.8	1.0	42.4	64.3	39.6	70.1

[a] The nonwhite category includes Hispanics.

[b] Single male headed family structure includes male individuals plus families headed by an unmarried male without children < age 18. Single female headed family structure is similarly defined.

APPENDIX G

Probit Estimates of Correlates of Current Income Poverty

Variable	1973 (N = 30,369[a]) Coefficient	1973 T-Ratio	1988 (N = 31,000[a]) Coefficient	1988 T-Ratio
RACE OF HEAD				
White	--	--	--	--
Black	.588	15.25	.352	8.42
Hispanic	.316	6.55	.260	5.74
Other	.139	1.31	.222	2.96
AGE OF HEAD				
16-21	.695	9.41	.422	5.23
22-30	.213	5.27	.180	4.39
31-40	--	--	--	--
41-50	-.089	-2.31	-.034	-.76
51-60	.033	.62	.039	.62
61-64	-.066	-.90	-.452	-5.52
ED OF HEAD				
0-8	.317	5.98	.205	3.02
9-11	.264	7.22	.268	6.65
12	--	--	--	--
13-15	-.009	-.20	-.136	-3.23
16	-.083	-1.23	-.156	-2.43
17+	-.147	-1.72	-.213	-2.45
AGE x EDUCATION OF HEAD	-.001	-4.03	-.001	-6.11
FAMILY STRUCTURE				
Husband-Wife	--	--	--	--
Nonwhite single mom	.510	8.27	.373	6.40
White single mom	.487	9.23	.416	7.55
Single dad	-.363	-2.49	-.138	-1.53
Other male headed	.331	5.75	.205	3.89
Other female headed	.586	11.09	.400	8.02
NUMBER OF OWN CHILDREN < 18	.216	26.94	.289	23.96
OCCUPATION OF HEAD				
Professional	--	--	--	--
Manager	-.162	-2.40	.179	2.38
Sales	.045	.59	.411	5.87
Clerical	-.184	-2.72	.066	.88
Craftsman	-.133	-2.41	.293	4.40
Operator	-.136	-2.32	.235	3.22
Transportation	-.024	-.36	.107	1.29
Laborer	.220	3.35	.432	5.09
Private HH	.699	5.35	.559	3.99
Service	.190	3.13	.537	8.61
Farmer	.909	13.73	.898	11.25
Military	-.190	-1.67	.219	1.61
Unemployed/NILF	-.318	-4.41	.127	1.75

(Appendix continues)

APPENDIX G (continued)

Variable	1973 (N = 30,369[a]) Coefficient	1973 (N = 30,369[a]) T-Ratio	1988 (N = 31,000[a]) Coefficient	1988 (N = 31,000[a]) T-Ratio
REGION				
Northeast	.043	1.17	-.147	-3.45
South	.203	5.92	.107	3.01
West	.239	6.65	.047	1.15
Midwest	--	--	--	--
LOCATION				
Suburban	--	--	--	--
City	.075	2.29	.125	3.49
Nonurban	.303	9.84	.329	8.88
Not Identified	X	X	.113	2.71
WEEKS WORKED				
Full-time (head)	-.037	-36.74	-.041	-43.90
Part-time (head)	-.022	-14.66	-.024	-18.53
Full-time (spouse)	-.015	-16.96	-.024	-25.16
Part-time (spouse)	-.005	-4.46	-.013	-10.0
STUDENT STATUS				
Student (head)	.126	1.34	.013	.16
Student (spouse)	.186	1.12	-.033	-.22
HEALTH STATUS[b]				
Disabled (head)	-.023	-.65	-.261	-6.26
Disabled (spouse)	-.035	-.64	-.216	-3.30
GHETTO[c]	-.125	-.61	-.074	-.39
CONSTANT	-.387	-3.54	-.016	-.14

Source: Estimates based on data from March CPS.

[a]Due to computational limitations, a random 80 percent sample from 1973 and a random 70 percent sample from 1988 were used for these calculations.

[b]A person is labelled disabled if they received transfer payments from a disability program or listed health reasons/disability as the reason they didn't work or only worked part-time or part-year in the previous year.

[c]GHETTO is a dummy variable equal to 1 if the head of the family is a nonwhite male, less than age 25, has less than 12 years of education, and lives in a central city.

APPENDIX H

Probit Estimates of Correlates of Net Earnings Capacity Poverty

Variable	1973 (N = 30,369[a]) Coefficient	1973 T-Ratio	1988 (N = 31,000[a]) Coefficient	1988 T-Ratio
RACE OF HEAD				
White	--	--	--	--
Black	1.355	27.84	.566	12.01
Hispanic	1.180	19.47	.576	11.10
Other	1.005	7.08	.372	4.42
AGE OF HEAD				
16-21	.429	4.03	.562	6.23
22-30	.508	8.91	.433	9.03
31-40	--	--	--	--
41-50	.127	2.44	.210	4.19
51-60	.553	8.24	.413	5.87
61-64	.725	7.55	.405	4.37
ED OF HEAD				
0-8	.693	9.96	.567	7.46
9-11	.435	8.75	.322	7.18
12	--	--	--	--
13-15	-.500	-6.79	-.428	-8.62
16	-.874	-6.88	-1.001	-9.86
17+	-1.321	-6.17	-.990	-6.79
AGE x EDUCATION OF HEAD	-.001	-6.12	-.001	-5.44
FAMILY STRUCTURE				
Husband-Wife	--	--	--	--
Nonwhite single mom	2.930	30.20	2.029	29.50
White single mom	3.816	49.02	2.231	35.78
Single dad	1.454	11.96	1.400	15.94
Other male headed	1.200	13.77	1.157	17.48
Other female headed	2.607	34.86	1.657	26.47
NUMBER OF OWN CHILDREN < 18	.517	41.16	.493	33.53
OCCUPATION OF HEAD				
Professional	--	--	--	--
Manager	.323	2.72	.008	.09
Sales	.353	2.71	.010	.12
Clerical	.154	1.48	.133	1.65
Craftsman	.189	1.96	-.008	-.10
Operator	.296	3.06	.195	2.39
Transportation	.395	3.70	.096	1.02
Laborer	.530	5.09	.110	1.14
Private HH	.512	2.85	.257	1.56
Service	.335	3.32	.152	2.05
Farmer	.336	2.89	.242	2.43
Military	-.323	-1.15	.348	2.15
Unemployed/NILF	-.975	-8.23	-.240	-2.80

(Appendix continues)

APPENDIX H (continued)

Variable	1973 (N = 30,369[a]) Coefficient	1973 (N = 30,369[a]) T-Ratio	1988 (N = 31,000[a]) Coefficient	1988 (N = 31,000[a]) T-Ratio
REGION				
Northeast	-.161	-3.09	-.504	-10.35
South	.211	4.58	.039	.95
West	-.090	-1.76	-.038	-.81
Midwest	--	--	--	--
LOCATION				
Suburban	--	--	--	--
City	.004	.09	.009	.20
Nonurban	.924	19.97	.438	10.08
Not Identified	X	X	.478	10.10
WEEKS WORKED				
Full-time (head)	-.031	-21.92	-.030	-29.61
Part-time (head)	-.021	-9.88	-.024	-15.70
Full-time (spouse)	-.006	-4.95	-.014	-11.94
Part-time (spouse)	-.003	-1.56	-.009	-5.01
STUDENT STATUS				
Student (head)	-.525	-3.27	-.363	-4.06
Student (spouse)	.221	.61	.225	1.20
HEALTH STATUS[b]				
Disabled (head)	-.075	-1.23	.969	22.20
Disabled (spouse)	-.094	-.73	.783	12.11
GHETTO[c]	.156	.21	.249	1.37
CONSTANT	-2.798	-17.17	-1.730	-11.92

Source: Estimates based on data from March CPS.

[a]Due to computational limitations, a random 80 percent sample from 1973 and a random 70 percent sample from 1988 were used for these calculations.

[b]A person is labelled disabled if they received transfer payments from a disability program or listed health reasons/disability as the reason they didn't work or only worked part-time or part-year in the previous year.

[c]GHETTO is a dummy variable equal to 1 if the head of the family is a nonwhite male, less than age 25, has less than 12 years of education, and lives in a central city.

APPENDIX I

Descriptions of Prototypical Families

MIDWESTERN FARM FAMILY

White head aged 41 to 50, education = 9 to 11, intact marriage, 3 children, farmer, Midwest, rural, head worked 52 weeks full-time, spouse nonworker.

RURAL BLACK FAMILY

Black head aged 31 to 40, education = 0 to 8, intact marriage, 5 children, farmer, South, rural, head worked 44 weeks full-time, spouse nonworker.

BLUE-COLLAR FAMILY

White head aged 41 to 50, education = 12, intact marriage, 2 children, craftsman, Midwest, suburban, head worked 45 weeks full-time, spouse nonworker.

SUBURBAN BLACK FAMILY

Black head aged 31 to 40, education = 12, intact marriage, 2 children, machine operator, Northeast, suburban, head worked 52 weeks full-time, spouse nonworker.

WHITE LOW-EDUCATION FAMILY

White head aged 31 to 40, education = 9 to 11, intact marriage, 4 children, laborer, West, city, head worked 40 weeks full-time, spouse worked 20 weeks part-time.

BLACK LOW-EDUCATION FAMILY

Black head aged 31 to 40, education = 9 to 11, intact marriage, 4 children, laborer, West, city, head worked 40 weeks full-time, spouse worked 20 weeks part-time.

AFDC STEREOTYPE FAMILY

Black head aged 22 to 30, education = 9 to 11, single mom, 3 children, nonworker, Northeast, central city.

SUBURBAN SINGLE-MOTHER FAMILY

White head aged 41 to 50, education = 12, single mom, 3 children, clerical, Midwest, suburban, 40 weeks full-time.

GHETTO YOUTH

Black, aged 16 to 21, education = 9 to 11, single male, service worker, not in school, Northeast, city, worked 10 weeks full-time, inner-city interaction term.

INDEPENDENT STUDENT

White, aged 16 to 21, education = 13 to 15, single male, laborer, Northeast, city, head worked 12 weeks full-time, student.

Endnotes

[1]The 1973 poverty thresholds used for calculations reported in this paper were constructed by using a deflated (CPI-U) version of the current poverty thresholds. The new poverty thresholds have been used by the Census Bureau since 1981 and differ from the old thresholds in three ways: (1) there are no longer separate thresholds for male- and female-headed families; (2) farm and nonfarm residences have the same poverty cutoffs; and (3) the poverty matrix has been extended to families of nine or more persons from the previous cutoff of seven or more persons. Use of the revised poverty thresholds raises the poverty count from 11.1 to 11.4 percent of the population in 1973.

[2]Race is categorized as either white or nonwhite. Nonwhite is composed of those individuals reporting their race as black or nonblack and nonwhite, plus those who reported their ethnic origin as Hispanic.

[3]By assigning the same expected earnings capacity to each individual with the same set of independent variables, we are neglecting the role of unobserved human capital characteristics, unmeasured labor demand circumstances, and "luck" in the earnings determination process. As a result, the distribution of predicted EC for each race-gender group is artificially compressed, as is the EC distribution of the entire population. We also estimate an EC value for each individual which accounts for earnings variation within each race-gender category by distributing individual observations within a cell randomly about the cell mean. The random number generator technique employed assumes that the distribution of observations within cells is normal, with a standard deviation equal to the standard error of a separately estimated race-gender earnings equation fit over only full-time, full-year workers (including an appropriately estimated variable). The estimates of the composition and incidence of earnings capacity poverty resulting from this randomization adjustment generally dampen the differences between current income (official) poverty and the EC estimates without the variance adjustment reported. However, the overall patterns are little changed.

[4]In addition, if a person reported they worked part-time because of a health limitation, a disabling condition, or the inability to find full-time employment, their EC was multiplied by .5, implying that these exogenous factors constrain capacity work to 20 hours per week. These adjustments, it should be noted, implicitly assume that the observed illness, disability, or unemployment circumstance is a "permanent" characteristic of the individual, consistent with the concept and definition of earnings capacity. To the extent that the circumstance is transitory, our procedure may bias the EC estimate for any particular individual. However, if the incidence of illness, disability, or unemployment among the population is roughly constant over time within broad population groups, the effects of these constraints on our group estimates of earnings capacity are appropriately reflected by this adjustment.

[5]This implicitly assumes that the observed value of these flows is an accurate measure of the family's ability to generate income from its assets. To the extent that these flows are underreported in the data, our estimates of GEC will be biased downward.

[6]The contribution of children to family economic status (real consumption) is a controversial issue. If the presence of a child conveys utility to the other members of the family unit, this contribution to well-being should be reflected in an ideal indicator of family economic position. Although our GEC measure does not include this child-based source of well-being, we nevertheless subtract the cost of child care necessary to enable the full use of family GEC. We justify the implicit neglect of children's contribution to family well-being on the grounds that: (1) not all children are "desired" (especially at the low end of the earnings capacity distribution); (2) if children's well-being is included in the family utility function, the simulated returns from parental use of earnings capacity entails a loss of parental care time which is not accounted for; and (3) reliable estimates of a money measure of the gain in family utility from children are nonexistent.

[7]Data on the costs of "acceptable" child care are from Sandra Hofferth's 1987 congressional testimony as reported in the Institute for American Values' policy brief in March 1989, titled "How the Child Care Market Works: An Economic Analysis." Communication with experts on the child care market suggests that the variation in hourly child care costs across regions is negligible, and that the real cost of child care has been virtually constant through the 1970s and 1980s.

[8]The 13.3 percent figure was chosen because that is the size of the nonaged current-income poverty population in 1988 and is a rough approximation of the poverty population over the time of our study. Our objective of comparing the composition and prevalence of poverty using the two definitions of well-being is facilitated by holding constant the percentage of individuals in the bottom tail of the two distributions.

[9]Appendixes G and H present four probit regressions, two each for 1973 and 1988. In each equation, the dependent variable takes on the value of 1 for a family which is in poverty (either current income or net earnings capacity poverty, depending on the regression), and 0 if not in poverty. The independent variables in each regression are the same, and include many of the family characteristics employed in Appendix F to describe the composition of poverty--race, education, age, occupation, gender, family size, region, urbanicity, and weeks and hours worked of the family head and the spouse. In addition, student and health status are included as independent variables. While the signs and magnitudes of the coefficients and their t-statistics convey some information regarding the independent contribution of each variable to the probability of a family being in poverty, the nonlinear specification of probit equations renders direct comparison of the coefficients from different years impossible.

[10]Two considerations could modify this conclusion. First, these family types may possess characteristics not recorded in our data that could reduce their "true" earnings capacity below that which we estimate for them. Illiteracy (in spite of years of schooling) or nonstandard language usage

are examples that come to mind. If measures of these characteristics could be incorporated into our estimates, the NEC poverty rate would be greater than that indicated in the table. Second, the presence of unreported (or "underground") income may vary over the groups. To the extent that such income is substantial, the measured CY poverty rate would overstate the "true" CY poverty rate.

[11]All of the family types included in Table 4 had predicted NEC poverty rates of at least 12 percent in 1988.

[12]These suggestions parallel those discussed in Ellwood (1988) and Haveman (1989).

References

Ando, Albert, and Modigliani, Franco. 1963. "The 'Life Cycle' Hypothesis of Saving: Aggregate Implications and Tests." American Economic Review 53:55-84.

Becker, Gary S. 1965. "A Theory of the Allocation of Time." The Economic Journal 75:493-517.

Ellwood, David T. 1988. Poor Support: Poverty in the American Family. New York: Basic Books.

Garfinkel, Irwin, and Haveman, Robert (with the assistance of David Betson). 1977. Earnings Capacity, Poverty and Inequality. New York: Academic Press.

Haveman, Robert. 1989. Starting Even: An Equal Opportunity Program to Combat the Nation's New Poverty. New York: Simon and Schuster.

Mayer, Susan E., and Jencks, Christopher. 1991. "Recent Trends in Economic Inequality in the United States: Income vs. Material Well-Being." Paper presented at Levy Conference on Inequality at the Close of the Twentieth Century.

Moon, Marilyn L., and Smolensky, Eugene, eds. 1977. Improving Measures of Economic Well-Being. New York: Academic Press.

Rector, Robert, O'Beirne, Kate Walsh, and McLaughlin, Michael. 1990. "How 'Poor' Are America's Poor?" Washington, D.C.: The Heritage Foundation.

Ruggles, Patricia. 1990. Drawing the Line: Alternative Poverty Measures and Their Implications for Public Policy. Washington, D.C.: Urban Institute Press.

Schwartz, Saul. 1986. "Earnings Capacity and the Trend in Inequality among Black Men." Journal of Human Resources 21(1):44-63.