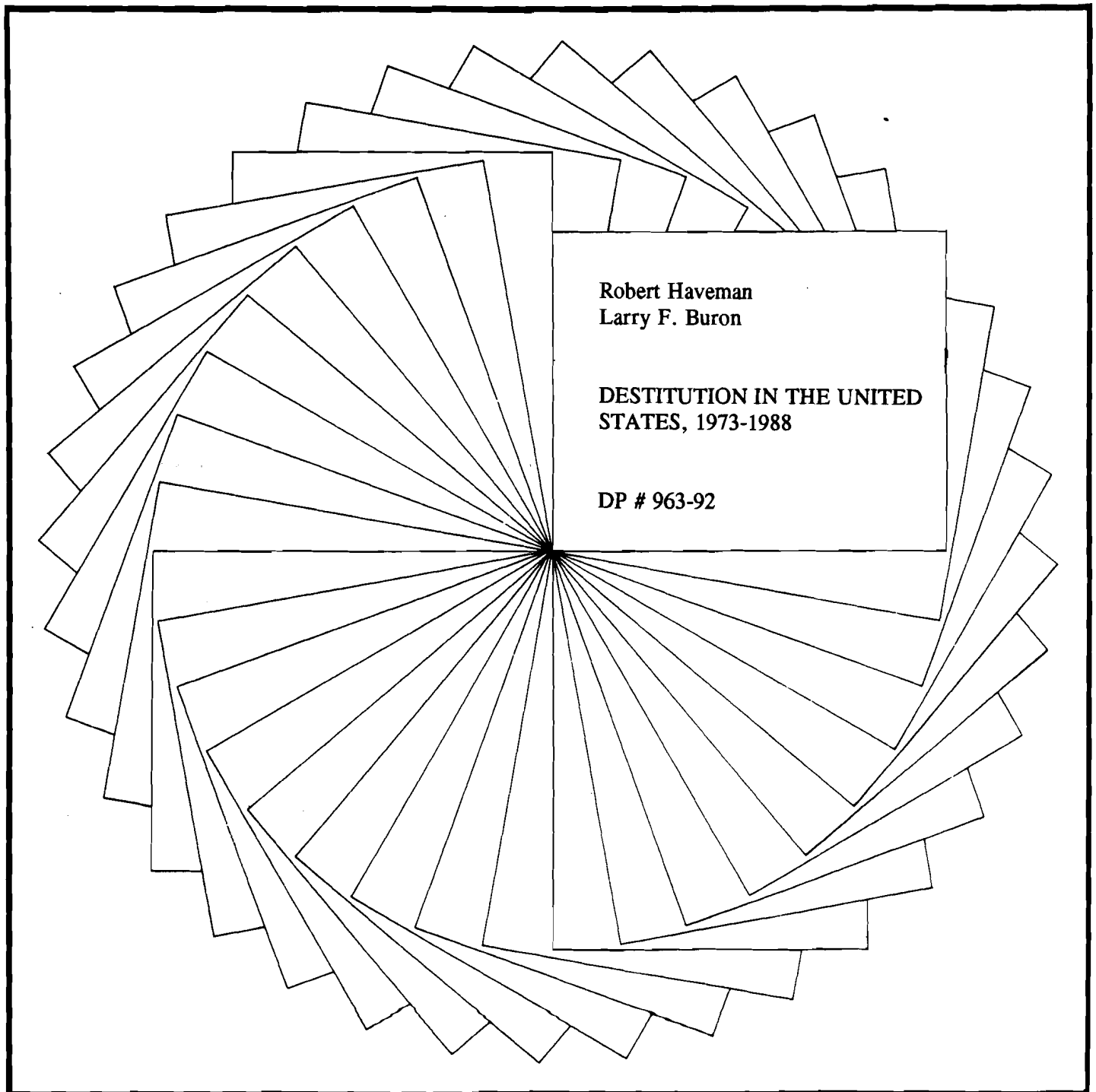University of Wisconsin-Madison

Institute for Research on Poverty

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DESTITUTION IN THE UNITED
STATES, 1973-1988

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Abstract

This paper measures the level of destitution in the United States and indicates how it has changed over the last two decades. Destitution is defined as the inability of a family to generate enough income to lift them out of poverty even if they were using their earnings capacity to its fullest. Using data from the March 1974 and March 1989 Current Population Surveys, the authors find that the rate of destitution has increased far more rapidly than that of official poverty. Some of this increase can be attributed to the rise in destitution among groups that are generally not thought of as vulnerable: whites, intact families, and family heads with more than a high school diploma. Most alarming, the destitution rate among children, especially those under six, is considerably higher than it is among persons over eighteen; in 1988, nearly 25 percent of children under six lived in families that could not have escaped poverty even if the adults in their families were working and earning at their full capacity levels.

Destitution in the United States, 1973-1988

Destitution: Being deprived, bereft of resources; resourceless, without the means of bare

subsistence, in absolute want. The Oxford English Dictionary, 1933

I. INTRODUCTION: "DESTITUTION" DEFINED

While "destitution" has no clear economic definition, it suggests a level of economic

well-being that is more extreme than "poverty." Not everyone who is poor is destitute, but all of

those who are destitute are surely poor.

Here, we define a family as destitute if full (or capacity) use of its earnings capabilities fails

to generate enough income to lift the family out of poverty. Destitute families, then, cannot escape

poverty without the support of other citizens or the state--they are the nation's truly dependent

population. In this paper, we measure the level of destitution in the United States and indicate how it

has changed over the past two decades.

II. MEASURING DESTITUTION

The measurement of destitution, so defined, requires that several components of its constituent

factors be given operational content. At a minimum, precise empirical definitions of "family,"

"earnings capability," "full use," and "poverty" are necessary.

Consider, first, the concept of "family." The population units that we will study are what the

Census calls "living units," and these units are composed of either "families" or "unrelated

individuals." The Census "living unit" is what we call our "family."[1]

We define the concept of family "earnings capability" (or "earnings capacity") to be the level

of annual income that a family could generate were the head, spouse (if present), and all other

prime-aged adults (aged 18-64) to fully use their human and physical capital at capacity levels. In

particular, we define family <u>Gross Earnings Capacity</u> (GEC$_F$) as the earnings capacity of the head

(EC$_H$) plus the earnings capacity of the spouse (EC$_S$) plus the sum of the earnings capacities of all

other adult family members (EC$_A$) plus property income (μ).

In obtaining EC$_H$, EC$_S$, and EC$_A$, we first estimate a two-equation earnings model for each of

four race (white-nonwhite) and gender groups. Then, using the coefficients from the relevant

equations of this model, we predict earnings capacity for each individual, on the basis of his/her

individual characteristics and the assumption that they work full-time, full year (see the appendix for

methodological details).

This measure, however, does not reflect the constraints on earnings that are created by both

health limitations and the inadequacy of aggregate demand. Hence, we adjust EC$_H$, EC$_S$, and EC$_A$ to

reflect the hours each year that each of these potential workers are unable to work because of health

problems and the inability to find a job. The adjustment factor is defined as:

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

where WC is reported weeks constrained from working because of sickness, disability, or

unemployment. 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, Γ was multiplied by .5, implying

that these exogenous factors constrain capacity work to 20 hours per week.[2] In summary:

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

The predicted and adjusted EC$_H$, EC$_S$, and EC$_A$ are then summed, and observed property

income[3] (μ) is added to the sum. That is:

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

This adjusted GEC$_F$ estimate, however, neglects the costs which must be borne by a family to achieve

the full use of its earnings capacity. Some of these costs may be specific to particular jobs, and

therefore reflected in the market wage rate, and, hence, GEC$_F$. Others, however, result from

obstacles to full-time, full-year work confronted by both the head and spouse, obstacles that are inherent in the structure or location of families, in combination with socially established standards for overcoming them.

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 to the full use of earnings capacity by arranging--and paying--for socially acceptable child care for young children. Hence, we subtract from each adjusted GEC_F the amount required to purchase acceptable child care, an amount that depends upon the number and ages of the family's children.[4] We take this value of GEC_F, adjusted for required child care costs, to be the family's Net Earnings Capacity (NEC); it reflects the net amount of income that a family could earn if the head, spouse, and other adults in the family--with their capabilities and characteristics--engaged in labor market work full-time, full year. For any family, then, NEC is taken to be the "full use" of human capital.

The level of NEC for each family is then compared to the official U.S. poverty line (PL) for that family, a line that reflects the size and composition of the family.[5] Families for which NEC > PL are able to earn sufficient income to escape poverty; the remaining families--those for which NEC < PL--are defined as "destitute."

III. AGGREGATE DESTITUTION IN THE UNITED STATES: 1973-1988

Table 1 presents the overall statistics on the number of families, individuals, and children who have been destitute in the United States over the past two decades. It also shows the percentage of families (and individuals and children that live in families) that are unable to earn enough to escape poverty (the destitution incidence rates), and the growth in these figures over the 1973-1988 period.

TABLE 1

Aggregate Number of Families, Individuals, and Children Who Are
Destitute in the United States, 1973 and 1988, and Incidence Rates

	1973	1988	1988/1973
Number (in millions)			
Total families	3.0	6.0	2.0
Total individuals	13.6	24.4	1.8
Total children < 18	7.9	12.2	1.5
Total children < 6	2.7	5.4	2.0
Incidence rates			
Families	6.3%	10.6%	1.7
Individuals	7.5%	11.6%	1.5
Children < 18	12.0%	19.3%	1.6
Children < 6	13.8%	24.2%	1.8

Source: Calculations by authors based on March 1974 and March 1989 Current Population Survey data.

Note: Only families with family heads aged 18-64 are included.

Consider first families and all people in families with nonaged heads. In 1973, 3.0 million

nonaged families, containing 13.6 million people, lived in destitution. This constituted about 6.3

percent of all families in the United States, and about 7.5 percent of the nation's population of 182.4

million who lived in families headed by a nonaged person in that year.

By 1988, both the number of destitute families and individuals had almost doubled. Because

the nation's nonaged population only increased by about 15 percent over this period, the destitution

incidence rates also rose rapidly; for both families and individuals, incidence rates were over 1.5

times as high in 1988 as 1973. By 1988, 11.6 percent of the nation's population living in families

headed by a nonaged person were destitute.

As high and rapidly growing as these rates are, they camouflage a much more serious

problem of destitution for children. In 1973, 12.0 percent of all children under 18 and 13.8 percent

of children under age 6 lived in families that were destitute, rates that were about double those for

individuals and families. However, even these high rates pale compared to their levels some 15 years

later. By 1988, nearly 20 percent of all children, and nearly 25 percent of all young children, lived

in families that were incapable of working themselves out of poverty. By 1988, destitution incidence

rates for children were at least 160 percent of their levels in 1973.

IV. PATTERNS OF DESTITUTION IN THE UNITED STATES: 1973-1988

Table 2 breaks down the levels and trends in destitution incidence rates from 1973 to 1988 by

detailed demographic groups. The top row of the table replicates incidence rates found in Table 1;

subsequent rows present rates for population subgroups.

TABLE 2

**Destitution Incidence Rates for Individuals and Children, by
Characteristics of Family Head and Family Type**

	Individuals			Children < 18		Children < 6	
	1973	1988	1988/1973	1973	1988	1973	1988
All	7.5	11.6	1.5	12.0	19.3	13.8	24.2
Race of head[a]							
White	4.3	8.0	1.9	6.7	13.0	7.7	16.9
Black	24.8	27.3	1.1	35.1	41.3	37.8	50.2
Hispanic	18.8	21.1	1.1	27.0	32.1	31.2	36.6
Sex of head[a]							
Male	3.8	6.8	1.8	5.5	10.3	7.0	14.0
Female	31.2	31.6	1.0	49.4	52.4	59.4	65.4
Education of head[a]							
0-8	15.1	25.9	1.7	23.6	40.4	29.4	49.2
9-12	5.4	12.9	2.4	8.5	21.4	10.7	28.1
13-16	2.7	7.1	2.6	4.5	11.8	4.9	14.4
17+	.6	1.6	2.7	.9	2.6	1.3	3.4
Family type							
Intact	3.5	5.9	1.7	5.3	9.5	6.8	13.1
Female head[b]							
w. children	42.9	45.7	1.1	49.4	52.5	59.4	65.4
White	31.4	39.4	1.3	36.7	44.6	48.0	61.9
Black	55.8	51.6	.92	62.8	59.5	67.6	67.6
Hispanic	57.0	53.4	.94	63.3	62.4	71.9	69.8
Male head[b]							
w. children	14.4	25.5	1.8	16.8	30.0	23.2	43.1
Single fem.[c]	12.6	14.7	1.2	NA	NA	NA	NA
Single male[c]	8.0	12.0	1.5	NA	NA	NA	NA
Single mother on welfare	62.9	71.1	1.1	67.2	75.1	70.9	83.3
Single mother not on welfare	28.4	33.5	1.2	33.8	39.4	44.1	49.9

Source: Calculations by authors based on data from March 1974 and March 1989 Current Population Survey.

Note: White includes all those neither of Hispanic origin nor black. Individuals are nonaged.

[a]Head can be of an intact or single-parent family, and male or female.

[b]Heads are single parents.

[c]Single persons with no dependents other than themselves.

Destitution Rates among Subgroups: 1973-1988

The individuals with the lowest destitution rates are those living in families with white heads; those living in male-headed (primarily, intact) families; and those in families whose head has at least some postsecondary schooling. In 1973, the highest incidence rate among these individuals was 4.3 percent, while in 1988 the highest rate was 8.0 percent. The individuals concentrated in the destitute population are those in families with black or Hispanic heads; those in female-headed families with children; and those in families whose head has eight or fewer grades of education. The lowest incidence rate among these groups in 1973 was 15.1 percent and in 1988 the lowest rate was 21.1 percent.

Further breakdowns within these high-destitution-rate groups reveal even more severe economic status problems. Over 50 percent of individuals living in black- or Hispanic-female-headed families with children are classified as destitute, irrespective of year. For all population subgroups, the destitution incidence rates for children lie well above those for all individuals, especially those for children less than six years old. Indeed, for both of the years the destitution rates for all young children (13.8 in 1973; 24.2 in 1988) were about twice the level for all individuals. The following indicates the probability that young children living in various family types were destitute in 1988:

*Black	50.2
*Hispanic	36.6
*Female headed	65.4
*Black female headed	67.6
*Hispanic female headed	69.8
*Single mothers on welfare	83.3

Nearly two-thirds of the nation's young children living in mother-only families are destitute; the families of these children lack the skills and other capabilities that would enable them to earn enough to escape poverty, even if all of the adults in these families used their capabilities to capacity.

Changes in Destitution Rates among Subgroups: 1973-1988

Table 1 reveals the enormous increase in destitution among U.S. citizens from 1973 to 1988.

This overall growth, however, disguises some of the more interesting patterns of change among

subgroups of the population over this period. Column 3 of Table 2 presents one indicator of the

growth of destitution rates among the detailed population groups. (The indicator of growth is the

number of times that the 1988 rate is greater than the 1973 rate--the rate in 1988 divided by the rate

in 1973). While the growth factor for the entire U.S. population is 1.5, the factors among the

population subgroups range from .92 (slightly less likely to be destitute in 1988 than in 1973) to 2.7

(a near threefold increase in the likelihood of destitution).

Identifying the groups with the highest growth factors indicates the types of families in the

United States which have experienced the largest relative losses in the capacity to escape poverty

through work and earnings over the past two decades. The following lists the primary subgroups in

the table with growth factors above 1.8:

*Whites	1.9
*Male heads	1.8
*Education 9-12	2.4
*Education 13-16	2.6
*Education 17+	2.7
*Intact family	1.7

Interestingly, families in these groups are predominantly white, intact, and of relatively high

education levels; they are not generally thought of as the most vulnerable.

In part, this pattern of intertemporal changes is an artifact of the low incidence rates of some

of the groups in 1973. Starting from a low base, relatively small absolute increases can lead to large

relative changes. However, even though only the Education 9-12 group had attained a destitution rate

in excess of the national rate of 11.6 by 1988, the striking increase in the aggregate destitution rate

over the period is largely attributable to the deterioration of the earnings capabilities of these

mainstream groups.

An alternative to the relative growth factor is the <u>absolute</u> percentage point change in the destitution rate. Using this measure, families headed by a single parent or one with low education are also seen to be increasingly vulnerable to destitution. As can be determined from the table, the subgroups with absolute increases in the incidence rate in excess of that in the aggregate national rate (4.1 percentage points) are:

*Education 0-8	10.8
*Education 9-12	7.5
*Education 13-16	4.4
*White female heads	8.0
*Male heads with children	11.1
*Single mothers on welfare	8.2
*Single mothers not on welfare	5.1

These groups tend to correspond most closely to those in the population thought of as vulnerable.

V. CONCLUSION

We have focused on a series of important questions, with public policy relevance. How many Americans are unable to earn enough to escape poverty? Has the number of them changed over time? Who are these destitute people?

Several conclusions stand out. First, the rate of destitution in the United States has grown far more rapidly than has the current income poverty rate. While the poverty rate for individuals rose from 10.2 to 12.5 percent from 1973 to 1988, the corresponding destitution rates for individuals rose from 7.5 to 11.6 percent. The story for children under six is even worse. The poverty rate rose from 15.4 to 21.5 percent while the destitution rate <u>nearly doubled</u>, rising from 13.8 to 24.2 over the same period.

Second, the destitution rate for children--especially children less than six--is far higher than it is for all individuals and families. Living units with high ratios of children to adults are heavily

concentrated at the very bottom of the nation's economic pecking order. It is indeed shocking that nearly one-quarter of America's young children live in families which do not have the capability to escape poverty by working and earning.

Third, the highest destitution rates are, as expected, concentrated among the population groups that are generally recognized as among the nation's most vulnerable--blacks (with a destitution rate of 27.3 in 1988), Hispanics (21.1), female family heads (45.7), and mothers on welfare (71.1). Many of these destitution rates are nearly as high as the poverty rates for these groups.

Finally, the increase in the destitute population since the early 1970s has come largely from groups that are generally viewed as doing quite well economically in the United States--whites, intact families, and those with relatively high educations. Discouragingly, even individuals in stable marriages and who have postsecondary schooling increasingly find themselves unable to escape poverty through their own efforts.

In short, the seriousness of the poverty problem for the United States is missed if one asks only about those with incomes below the poverty line. The image of the problem changes--and its seriousness increases--when one observes the level and changes in economic destitution prevalent in the nation.

Appendix

To estimate the earnings capacities of the 18-64 year olds, we fit an identical two-equation model for four race-gender (white-nonwhite; male-female) categories in both 1973 and 1988. We relied on the microdata from the March 1974 (for income year 1973) and March 1989 (for income year 1988) CPS surveys. These data serve 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.

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 and 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 for each individual. The selectivity correction term 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 selectivity correction term.

The coefficient estimates from the eight race-gender equations for each year are available from the authors. 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 earnings capacity.

If we assigned the same expected earnings capacity to each individual with the same set of independent variables, we would be 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 estimate an EC value for each individual which accounts for earnings variation within each race-gender group by distributing individual observations within a cell randomly about the cell mean. The random number generator technique employed assumes that the distribution observations within cells are 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. The estimates of the destitution rate exhibit a similar pattern over time and between groups as the variance added back results we reported suggest, but the levels of destitution are somewhat smaller. For example the overall destitution rate was 5.2 percent in 1973 and 7.8 percent in 1988.

Notes

[1]Related subfamilies are treated as part of the primary family. Families are included in our sample if the head of the family or head of a subfamily is between 18 and 64.

[2]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 captured by this adjustment.

[3] Property income includes net interest, dividends, rent, alimony, and child support income. Observed property income is used because we assume that people are using their physical capital to full capacity.

[4]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. We assume the cost of child care to be $1.50 per hour in 1988, that each child less than 6 years of age requires 2,000 hours of child care per year, and that each child aged 6-11 requires 800 hours of after-school and summer care. Hence, the child care adjusted value of NEC is: GEC_F - ($3,000 x number of children less than 6 plus $1200 x number of children aged 6-11).

[5]The poverty thresholds used for calculations reported in this paper were constructed by (1) deflating the current version of the poverty thresholds to 1968 using CPI-U (which is the inflation index the Census has used to inflate the poverty line) and (2) inflating the current version of the 1968 poverty thresholds to 1973 and 1988 using CPI-U-X1. The first year available for the CPI-U-X1

index is 1968. We started with the current version of the poverty thresholds because the Census Bureau stopped the differential treatment of female-headed households and farm residences and extended the poverty matrix to families of nine or more persons in 1981. CPI-U-X1 was used because CPI-U exaggerates the true rise in living costs in the 1970's due to the inordinate weight given to the cost of newly purchased homes. Therefore, the poverty thresholds in 1988 will be lower (and thus fewer people will be labelled poor or destitute) than the poverty thresholds used by the Census.