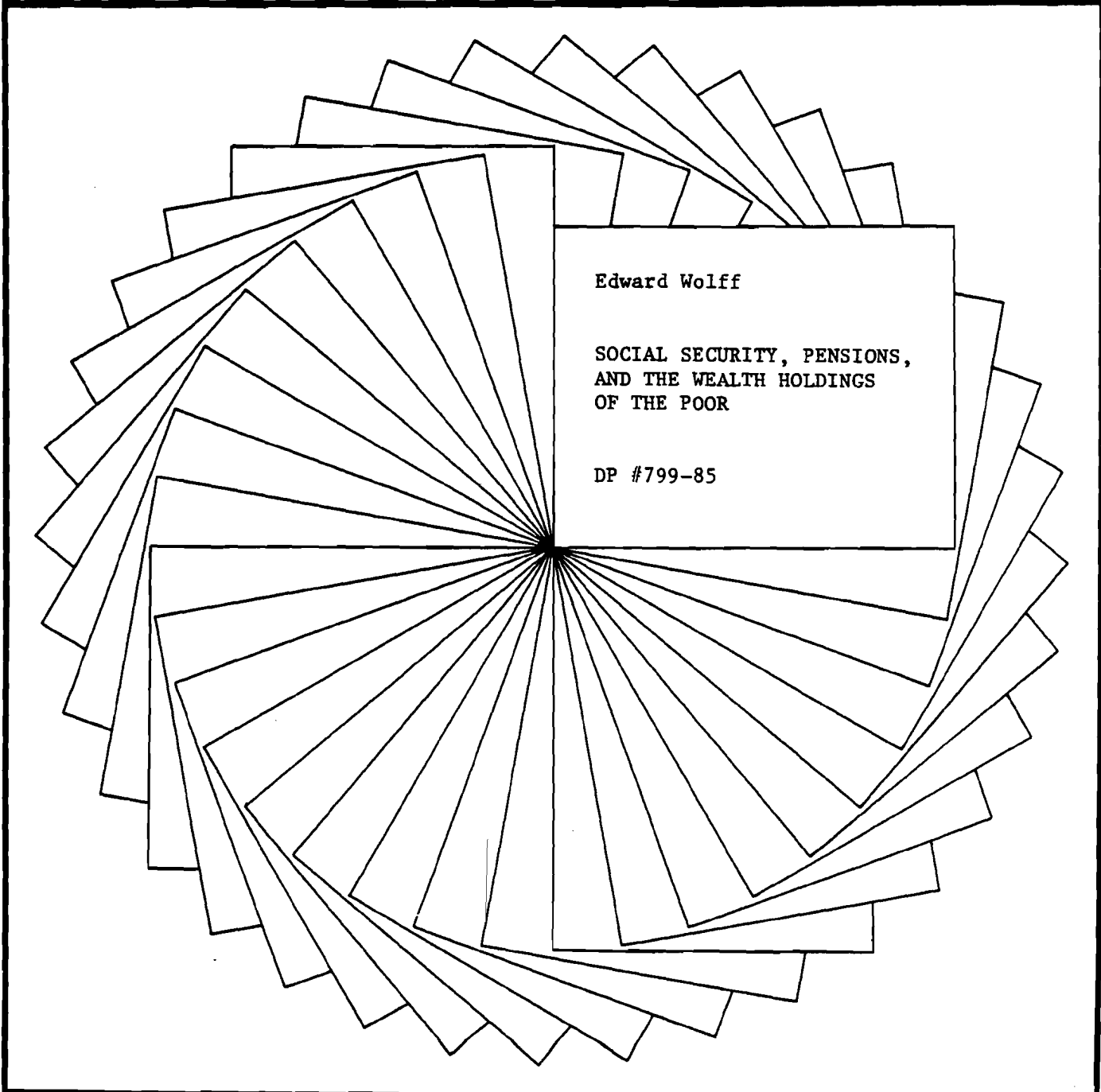


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A graphic consisting of a fan of approximately 20 rectangular papers fanned out from a central point. The papers are arranged in a semi-circle, with the top edge of the fan pointing towards the top right. A white rectangular box is superimposed on the right side of the fan, containing text.

Edward Wolff

SOCIAL SECURITY, PENSIONS,
AND THE WEALTH HOLDINGS
OF THE POOR

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SOCIAL SECURITY, PENSIONS,
AND THE WEALTH HOLDINGS OF THE POOR

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Abstract

Using the 1983 Survey of Consumer Finances, this study analyzes the wealth holdings of families with incomes below the poverty line. The paper has five principal findings. First, relative to families with income above the poverty line, poor families had higher ratios of mean and median total household wealth (0.28 and 0.30, respectively) of the wealth of the non-poor than of income (0.17 and 0.20), but the ratio of mean fungible wealth was comparable to that of income (0.19). Second, the average portfolio composition of wealth was quite different among families below and above the poverty line: the poor held 77 percent of their net worth in the form of home equity, durables, and inventories; the non-poor, 52 percent. Third, average wealth increased steadily with age among families above the poverty line, but peaked at middle age, then declined, among the poor. As a result, the ratio of average wealth between elderly poor and non-poor families was considerably less than the corresponding ratio among the young and middle-aged. Fourth, the distribution of wealth was slightly more equal among poor families than among families not in poverty. Among the young and the old, however, there was considerably less inequality of wealth among the poor than the non-poor, but there was greater wealth inequality among poor middle-aged families. Fifth, the inclusion of pension wealth in the household portfolio increased the disparity of wealth between families below and above the poverty line, but social security wealth had the opposite effect, closing that gap somewhat. I conclude that the social security system has made a significant contribution to improving the well-being of the poor, although much of its effect is to offset the higher private pension wealth of the non-poor.

Social Security, Pensions, and the Wealth Holdings of the Poor

I. Introduction

Recent work on poverty has focused on its persistence among families. Bane and Ellwood (1983) have estimated the dynamics of poverty spells among families. Beach (1977), Thornton, Agnello, and Link (1978) have looked at income distribution and the poverty rate over the business cycle. Blank (1985) has extended part of her previous analysis to the cyclical behavior of various income components. Finally, Holden, Burkhauser, and Myers (1985) have investigated the dynamics of poverty among the elderly.

One implication of such studies is that current income may not be the best indicator of poverty status. A better measure of poverty status, and also a more comprehensive measure of family well-being, may be family wealth, since wealth reflects accumulated lifetime income (to present age). Thus, some families found below the poverty line on the basis of current income may have enjoyed relatively prosperous periods in previous years. For these families, poverty may be a transitory condition, based on a temporary period of unemployment, illness, or the like, or on a recent change in family status, such as divorce. These families may hold a relatively high level of wealth. For others, poverty may be a more or less persistent feature of their life history. Such families may consist of a non-working parent with several children and no previous labor force participation, and they may have had a long history of low-income years. As a result, their wealth holdings may be low even relative to current income.

This study analyzes the wealth holdings of the poor, addressing a number of issues. First, are the poor (by which I mean families with income below the official poverty line) relatively better off or worse off in terms of

wealth than in terms of income? Second, do the poor hold different forms of wealth than families above the poverty line? This might be expected a priori, since the poor are likely to hold wealth largely for immediate consumption and their wealth may largely take the form of owner-occupied housing, consumer durables, and household inventories. If such is the case, how would the poor fare relative to the non-poor in terms of liquid and investment wealth?

Third, do the poor face severe credit constraints on borrowing and hence have a substantially lower debt-equity ratio than the non-poor? Fourth, how does the wealth of the poor vary over the life cycle? Do poor families accumulate wealth for retirement? Is the life cycle model of savings appropriate for the poor (see Modigliani and Blumberg, 1954, Ando and Modigliani, 1963, or Wolff, 1981)? Is their age-wealth profile hump-shaped? Fifth, if the wealth of the poor is converted to an income of annuity flow, and this annuity is included as part of family income, how would this affect the calculation of the poverty rate?

Sixth, what fraction of those families below the poverty line have relatively high wealth and what form does this wealth take? Seventh, how unequal is the distribution of wealth among poor families in comparison to families above the poverty line? Eighth, how does the inclusion of social security and pension wealth in the household portfolio affect the wealth holdings of the poor relative to those families above the poverty line? What proportion of poor and non-poor families have these forms of wealth? What are the relative magnitudes between the two groups? Insofar as social security is a government transfer program, how has this aspect of government policy affected the distribution of augmented household wealth?

The study uses the 1983 Federal Reserve Board version of the Survey of Consumer Finances (SCF). This sample consists of 3,824 families, but does not

contain the high-income supplement which has recently been added to the file. The SCF contains a rich variety of demographic information, as well as detailed income and wealth portfolio data for each household in the sample. In particular, variables on total family income, family size, and age of family members are available, which allow identification of families living below the poverty line.

All results are weighted, using weights provided in the FRB sample. The weights reflect three factors: (i) nonresponse error, (ii) selection probability, and (iii) post-stratification.

The remainder of the paper is divided into five parts. Part II presents a comparison of the published U.S. Census Bureau Current Population Report estimates and those based on the SCF. Part III presents comparative results on mean and median family income by source for the populations above and below the poverty line. Part IV gives results on the relative wealth holdings of the poor and the non-poor population. Part V extends the household balance sheet to include pension and social security wealth. Concluding comments appear in part VI. A description of the raw data can be found in Survey Research Center (1983). Details on definitions of income and wealth can be found in the Appendix.

II. A Comparison of the SCF with Census Data

Before beginning the analysis, it is useful to compare SCF results with published Census Bureau results on the poverty rate and on income levels (see Table 1). The official poverty statistics for 1982 indicate that 12.2 percent of all families or unrelated individuals had family income below the poverty line (CPR, Table 34).¹ Calculations from the SCF indicate a poverty rate of 12.6 percent for families, slightly above that of the official rate. The

Table 1

A Comparison of Results from Current Population Reports
(1982 data) and the Survey of Consumer Finances (1983 data)

	CPR ^a	SCF	Ratio of SCF/CPR
1. Poverty Rate			
a) Individuals	0.150	0.133	0.88
b) Families	0.122	0.126	1.03
2. Mean Family Income by Type, for All Families			
a) Wage and Salary Income	\$20,543	\$17,260	0.84
b) Self-employment Income	1,643	1,501	0.91
c) Dividends, Interest, and Rent	1,753	1,796	1.02
d) Social Security Income ^b	1,534	872	0.57
e) Other Transfer Income ^c	685	495	0.72
f) Pensions, Annuity, Alimony and other Income	1,205	2,403	1.99
g) Total Family Income ^d	27,390	26,501	0.97
3. Mean Family Income by Type, for Families below the Poverty Line			
a) Wage and Salary Income	2,329	1,815	0.78
b) Self-employment Income	65	161	
c) Dividends, Interest, and Rent	105	107	1.02
d) Social Security Income ^b	758	700	0.92
e) Other Transfer Income ^c	1,591	1,557	0.98
f) Pensions, Annuity, Alimony, and Other Income	301	806	2.68
g) Total Family Income ^e	5,019	5,101	1.02

- a. Source is U.S. Bureau of the Census, Current Population Reports, Series P-60, No. 144, Characteristics of the Population Below the Poverty Level: 1982, U.S. Government Printing Office, Washington, D.C., 1984.
- b. Includes retirement and survivors' benefits, permanent disability insurance payments, and railroad retirement benefits.
- c. In the CPR, this entry is defined as the sum of AFDC, SSI, unemployment and workers' compensation, veterans' payments, and other (cash) public assistance; in the SCF, this entry is defined as the sum of ADC, AFDC, food stamps, SSI, and other public assistance.
- d. In the SCF, total family income is reported as a separate entry. Because of this and missing information for individual income components, the sum of income components will not necessarily equal total family income. In this case, the means of income components sum to 24,327, 89 percent of mean total family income.
- e. See previous footnote. In this case, the mean values of the income components sum to 5,146, almost equal to reported mean total family income.

probable cause of this slight overrepresentation of the poverty population is the slight underreporting of family income (see below).² On the other hand, the official poverty rate for individuals is 15.0 percent, in contrast to a 13.3 percent rate calculated from the SCF. The reason is that average family size among poor families was only slightly larger than that among non-poor families. The probable cause of this is that there is an underrepresentation of non-poor, single-individual households in the SCF.

Panel 2 of Table 1 contrasts mean income by component, as reported in the CPR and the SCF. Average self-employment income, property income and total family income are quite close in the two surveys. Wage and salary income is 16 percent lower in the SCF, while social security income is 43 percent lower. Other transfer income is 28 percent lower in the SCF, despite the fact that SCF definition includes food stamps and other unspecified assistance, whereas the Census definition excludes all in-kind benefits. The miscellaneous income category is twice as great in the SCF than the CPR, though this discrepancy may be largely due to difference in definition. Similar statistics are shown for poverty populations from the two sources in Panel 3. The pattern is similar to Panel 2, except that social security income and other transfer income are quite close in the two sources.

III. Comparative Income Statistics

Table 2 presents some comparative income statistics on families below the poverty line and those above. Panel 1 shows relative income receipts across all age groups for the poor and the non-poor. Only 45 percent of poor families reported receiving wage and salary income, in contrast to 83 percent of families above the poverty line. Five percent of poor families received self-employment earnings, compared to 11 percent of non-poor families. Among

Table 2
Family Income by Type, Poverty Status, and Age^a

	Proportion of Families Receiving Component			Mean Value of Component for Recipients Only		
	Poor	Non-Poor	Poor/Non-Poor	Poor	Non-Poor	Poor/Non-Poor
1. All Ages						
a) Wage and Salary Income	0.454	0.833	0.55	\$3,998	\$26,021	0.15
b) Self-employment Income	0.045	0.109	0.41	3,596	17,731	0.20
c) Dividends, Interest, and Rent	0.126	0.524	0.24	847	4,148	0.20
d) Social Security Income	0.189	0.144	1.31	3,702	6,453	0.57
e) Pension Income	0.041	0.100	0.41	2,032	7,586	0.27
f) Total Family Income	1.000	1.000	1.00	5,101	30,293	0.17
Memo: Median Family Income	-	-	-	4,613	23,458	0.20
2. Under 65						
a) Wage and Salary Income	0.582	0.933	0.62	4,080	26,596	0.15
b) Self-employment Income	0.057	0.114	0.50	3,738	18,907	0.20
c) Dividends, Interest, and Rent	0.119	0.493	0.24	568	3,017	0.19
d) Social Security Income	0.060	0.029	2.07	4,131	5,920	0.70
e) Pension Income	0.026	0.045	0.58	1,958	9,381	0.21
f) Total Family Income	1.000	1.000	1.00	5,458	31,907	0.17
Memo: Median Family Income	"	"	"	5,072	25,330	0.20
3. 65 or Over						
a) Wage and Salary Income	0.055	0.303	0.18	1,074	17,011	0.06
b) Self-employment Income	0.008	0.083	0.10	193	9,179	0.02
c) Dividends, Interest, and Rent	0.151	0.699	0.22	1,531	8,499	0.18
d) Social Security Income	0.603	0.771	0.78	3,553	6,561	0.54
e) Pension Income	0.089	0.395	0.23	2,064	6,522	0.32
f) Total Family Income	1.000	1.000	1.00	3,990	21,808	0.18
Memo: Median Family Income	"	"	"	3,856	14,135	0.27

a. In the SCF, there is no category for head of household. A family is classified as under 65 if neither the respondent nor spouse was 65 or over in age, and 65 or over if one or the other was over 64 years of age.

poor families, 13 percent received some form of property income, in contrast to 52 percent of non-poor families. About 19 percent of poor families reported some form of social security income (including retirement, survivors', disability and railroad retirement benefits, but excluding Supplemental Security Income), in contrast to 14 percent of families above the poverty line. This figure is quite low compared to published CPR results (Table 34), which show that 23.8 percent of the non-poor received social security income. Only 4 percent of poor families received private pension benefits, while 10 percent of the non-poor received pension income.

Mean family income among poor families was \$5,101 in 1982 and that among the non-poor was \$30,293. The ratio between the two means is 0.17. Median family income among poor families was \$4,613 and that among the non-poor was \$23,458, for a ratio of 0.20.³ The larger ratio in median family income is due to approximately symmetric distribution among the non-poor. The ratios in mean income by component, among recipient families only, between the two samples fall between about a sixth and a fourth, except for social security income, where the ratio is over half.

In panels 2 and 3 of Table 2, the same set of statistics is shown for families under 65 years of age and 65 or over (see footnote a of Table 2 for definitions of the age classes). A higher percentage of both poor and non-poor families under 65 received labor income and a lower percentage social security and pension income. The ratio in mean income values by component is almost identical among families under 65 as among all families.

Among families aged 65 or over, 30 percent of non-poor families received wage and salary income and 8 percent received self-employment income, in contrast to only 6 percent of poor families reporting wage and salary income

and 1 percent reporting self-employment income. Moreover, average labor earnings were almost 20 times greater among non-poor recipients than among poor recipients. Sixty percent of poor families 65 or over reported social security income, while 77 percent of the non-poor did. The ratio in average social security income among these recipients in the two samples is 0.54. Almost 40 percent of elderly non-poor families received private pension income, in contrast to only 9 percent of poor families, and average pension benefits were over three times greater among elderly non-poor families. Average income was lower among the elderly than among the non-elderly, but the ratio in average family income between the poor and non-poor elderly is about the same as that between the total poverty population and the total non-poverty population.

IV. Relative Wealth Holdings of the Poor and Non-Poor

Table 3 shows a breakdown of wealth by asset and liability for the poor and non-poor. Unless otherwise noted, all wealth components are valued in terms of market or cash surrender value (see Table A.1 for the full household balance sheet and the Appendix for the definition of each component).

Almost 31 percent of poor families owned their own homes (including mobile homes) in 1983,⁴ and the average value among homeowners was 37 thousand dollars. The homeownership rate among non-poor families was 66 percent, almost double that of poor families, and its average value among owners was 71 thousand dollars, about double that among poor homeowners. Almost half of all poor families owned at least one vehicle, and the average value was \$3,200. Almost 90 percent of non-poor families owned at least one vehicle, about double the ownership rate among poor families, and its average value was \$6,800, over twice that of poor families. By construction, all families are

Table 3
Family Wealth by Component and Poverty Status

Component	Proportion of Families with Asset (Liability)			Mean Value of Asset (Liability) for Owners Only		
	Poor	Non-Poor	Poor/ Non-Poor	Poor	Non-Poor	Poor/ Non-Poor
1. Total Assets	1.000	1.000	1.00	\$32,623	\$122,039	0.27
a) Owner-Occupied Housing	0.308	0.655	0.47	37,010	71,195	0.52
b) Vehicles	0.483	0.895	0.54	3,168	6,818	0.46
c) Other Consumer Durables	1.000	1.000	1.00	8,826	12,167	0.73
d) Inventories	1.000	1.000	1.00	1,029	2,390	0.43
e) Demand Deposits	0.363	0.843	0.43	643	2,235	0.29
f) Savings Deposits, CDs, etc. ^a	0.305	0.749	0.41	2,508	14,130	0.18
g) Insurance and Pension CSV ^b	0.047	0.219	0.21	2,717	7,716	0.35
h) Unincorporated Business Equity	0.027	0.079	0.34	154,523	169,645	0.91
i) Investment Real Estate	0.068	0.193	0.35	35,337	80,851	0.44
j) Financial Securities, Stocks, and Other Assets ^c	0.103	0.442	0.23	2,984	28,697	0.10
2. Total Liabilities	0.348	0.668	0.52	5,511	17,322	0.32
a) Mortgage Debt	0.066	0.339	0.19	21,311	29,415	0.72
b) Other Debt	0.326	0.578	0.56	2,659	3,670	0.72
3. Net Worth	1.000	1.000	1.00	30,350	109,945	0.28
Memo: Median Net Worth	4	4	4	11,400	38,500	0.30

a. This also includes time deposits, money market funds, certificates of deposit, and IRA and Keogh accounts.

b. CSV: cash surrender value.

c. This category includes all government bonds, including U.S. savings bonds; corporate, foreign, and other bonds; corporate stock; mortgage assets; bonds, precious metals, jewelry and art, loans to friends and relatives, and the cash surrender value of company savings plans.

imputed other consumer durables as well as household inventories (see the Appendix). The average value of other consumer durables owned by poor families was almost three fourths of that owned by the non-poor, and the average value of the household inventories of the poor was less than that of the non-poor.

Over a third of poor families had at least one checking account and 31 percent had a savings account or some other form of liquid asset. In contrast, 84 percent of non-poor families had at least one checking account and three quarters had a savings account or some other type of liquid asset. Among depositors, the average balance of demand deposits for non-poor families was over three times that of poor families and the average balance of these other liquid assets was over five times as great.

About a third the number of poor families relative to the non-poor had equity in an unincorporated business, and an almost identical ratio existed for investment real estate. However, the average value of unincorporated business equity among owners from poor families was almost equal to that among those owners above the poverty line, and the average value of investment real estate holdings among poor owners was almost half that of non-poor owners.

Only 10 percent of poor families owned some form of financial securities (including U.S. savings bonds) and only 2 percent of them held corporate stock (not on table). Moreover, the average holding of this class of assets was 10 times as great among owners above the poverty line as owners below the poverty line.

On the liability side, 7 percent of poor families, or 21 percent of poor homeowners, held mortgage debt, in contrast to 34 percent of non-poor families, or 52 percent of non-poor homeowners. The average value of outstanding mortgage debt among mortgagees below the poverty line was \$21,000, and the average ratio of mortgage debt to house market value among poor

homeowners was 0.12. For mortgagees above the poverty line, the average value of their outstanding mortgage loans was \$29,000, and for non-poor homeowners, the average ratio of mortgage debt to house value was 0.21, about double that for poor homeowners. Almost a third of poor families had some form of non-mortgage debt, compared to 58 percent of families above the poverty line. Among debt holders, the average value of other debt for poor families was almost three quarters that of other families.

The average value of total assets (Table 3) for poor families was \$32,600, that of families above the poverty line was \$122,000, and the corresponding ratio between the two is 0.27. This compares to a ratio in mean family income (Table 2) of 0.17 between the two groups. The average debt (including home mortgages) for all poor families was \$1,917 and that for families above the poverty line was \$11,571 (not shown on tables). As a result, Table 4 shows that the ratio in average net worth between the two groups is 0.28, slightly higher than that of mean assets. Median net worth for poor families was \$11,400, 38 percent of the group's mean net worth. The ratio in median net worth between poor and non-poor families is 0.30, greater than the 0.20 ratio in median family income.

As we can see from Table 4, the relatively high net worth of poor families is due primarily to two components: net equity in owner-occupied housing, and consumer durables and inventories. The mean value of home equity among poor families was 27 percent that of non-poor families, and the mean value of durable and inventories among poor families was 65 percent that of the non-poor. Together, home equity, durables, and inventories were 77 percent the net worth of poor families, compared to 52 percent that for families above the poverty line. The only other assets of appreciable

Table 4

Mean Family Wealth by Component, Poverty Status, and Age^a

Wealth Component	All Ages			Under Age 35		
	Poor	Non-Poor	Poor/ Non- Poor	Poor	Non-Poor	Poor/ Non- Poor
1. Net Equity in Owners						
Occupied Housing	\$9,993	\$36,661	0.27	\$2,981	\$12,234	0.24
2. Durables and Inventory	13,524	20,659	0.65	11,909	19,350	0.62
3. Demand Deposits, Savings Deposits, Insurance CSV, etc.^b	818	13,057	0.06	472	4,618	0.10
4. Unincorporated Business Equity	4,172	13,402	0.31	812	3,385	0.24
5. Investment Real Estate	2,403	15,604	0.15	1,697	5,511	0.31
6. Financial Securities, Stocks, and Other Assets^c	307	12,684	0.02	365	4,682	0.08
7. Non-Mortgage Debt	(867)	(2,122)	0.41	(1,050)	(1,768)	0.59
Net Worth						
A. Total Net Worth	30,350	109,945	0.28	17,186	48,012	0.36
B. Net Worth Less Durables and Inventories	16,826	89,286	0.19	5,277	28,662	0.18
C. Net Worth Less Durables, Inventory, and Consumer Debt	17,192	90,754	0.19	5,585	29,721	0.19
Memo: Median Values of						
A. Total Net Worth	11,400	38,500	0.30	9,100	21,800	0.42
B. Net Worth Less Durables and Inventories	0	24,100	0.00	0	3,200	0.00
C. Net Worth Less Durables, Inventory, and Consumer Debt	0	24,800	0.00	0	3,400	0.00
Memo: Gini Coefficient of Net Worth	0.600	0.633	----	0.435	0.560	----

(table continues)

Table 4 (continued)

Mean Family Wealth by Component, Poverty Status, and Age^a

Wealth Component	Ages 35-64			Age 65 or Over		
	Poor	Non-Poor	Poor/ Non-Poor	Poor	Non-Poor	Poor/ Non-Poor
1. Net Equity in Owners						
Occupied Housing	15,686	48,067	0.33	13,003	48,329	0.27
2. Durables and Inventory	12,075	22,713	0.53	9,462	16,543	0.57
3. Demand Deposits, Savings Deposits, Insurance CSV, etc.^b	742	15,137	0.05	1,624	27,026	0.06
4. Unincorporated Business Equity	10,223	17,193	0.68	395	20,688	0.02
5. Investment Real Estate	3,497	17,826	0.20	1,845	28,556	0.06
6. Financial Securities, Stocks, and Other Assets^c	402	13,418	0.03	74	26,052	0.00
7. Non-Mortgage Debt	(1,222)	(2,832)	0.43	(90)	(544)	0.17
Net Worth						
A. Total Net Worth	41,403	131,522	0.31	26,313	166,650	0.16
B. Net Worth Less Durables, and Inventories	29,328	108,809	0.27	16,851	150,107	0.11
C. Net Worth Less Durables, Inventory, and Consumer Debt	29,966	110,927	0.27	16,913	150,275	0.11
Memo: Median Values of						
A. Total Net Worth	12,200	65,800	0.19	12,900	63,300	0.20
B. Net Worth Less Durables, and Inventories	200	43,800	0.00	0	52,200	0.00
C. Net Worth Less Durables, Inventory, and Consumer Debt	200	45,200	0.00	0	53,300	0.00
Memo: Gini Coefficient of Net Worth	0.689	0.604	----	0.525	0.609	----

- a. A family is classified as under age 35 if the age of both respondent and spouse is under the indicated age; between age 35 and 64 if both respondent and wife are under 65 and either is over 34; and at age 65 or over if the age of either spouse is greater than 64.
- b. This category includes all checking and savings accounts, time deposits, certificates of deposit, money market funds, IRA and Keogh accounts, and the cash surrender value (CSV) of insurance and pension plans.
- c. This category includes all government bonds, including U.S. savings bonds; corporate, foreign, and other bonds; corporate stock; mortgage assets; boats, antiques, precious metals, jewelry and art; loans to friends and relatives, and the cash surrender value of company savings plans.

magnitude held by the poor were unincorporated business equity and investment real estate, which amounted to 22 percent of their average net worth.

Moreover, mean business equity among poor families was as high as 31 percent of that among the non-poor, and investment real estate among poor families averaged 15 percent that among families above the poverty line.

All other assets combined amounted to only 4 percent of the net worth of the poor. Average balances of demand deposits, savings deposits, and other liquid assets among poor families amounted to only 6 percent that of the non-poor. The ratio in average holdings of financial securities, stocks, and other assets between the two groups is only 0.02. This compares to a corresponding ratio of property income of 0.05.

The ratio in total liabilities (including mortgage debt) to net worth is 0.063 among poor families, lower than the corresponding ratio of 0.105 among the non-poor. However, the ratio of non-mortgage debt to worth is actually higher among poor families than among others -- 2.9 percent compared to 1.9 percent. The average non-mortgage debt of poor families was 41 percent that of the non-poor.

There is reason to believe that the concept of net worth used in Tables 3 and 4 does not accurately reflect the fungible or cash surrender value of the household's portfolio. The reason is that durables and inventory are included as assets, though they are very difficult to convert into cash. If these two items are excluded from the household portfolio, as shown on Table 4, then the ratio of "fungible wealth" between poor and non-poor families averages 0.19, almost identical to the ratio of mean family income between the two groups. However, median fungible wealth among poor families is actually close to zero. In other words, only half of poor families held fungible wealth. If consumer debt is also excluded from -- that is, added back -- to household wealth

(since it is normally secured by household durables), the median value of this measure of wealth among the poor remains at zero.

There is also strong reason to believe that the ratio of fungible wealth between the poor and the non-poor is actually overstated because of considerable underreporting of financial assets and equities. My estimate is that only 40 percent of the total value of fixed claims and equities held by households is captured in the FRB SCF sample (see the Appendix for details). In addition, household liabilities appear to be underreported by 53 percent. If these assets and liabilities are proportionately adjusted to match the aggregate balance sheet totals, the ratio of fungible net worth between the poor and non-poor falls to 0.16.

Wealth by Age Group

In Table 4, poor families and non-poor families are each sub-divided into three age groups: under 35 (the young), 35 to 64 (middle-aged), and over 65 (elderly). Wealth holdings by age group are very different. Among the poor, mean wealth was highest among the middle-aged. Average wealth among poor families under 35 was 22 percent that of middle-aged poor families, and mean wealth among the elderly poor was 64 percent that of the middle-aged poor. Similar patterns by age group can be observed for fungible wealth. In contrast, among families above the poverty line, mean wealth increased with age, from \$48,000 among the young to \$132,000 among the middle-aged to \$167,000 among the elderly. Similar patterns also exist for fungible wealth. Median wealth patterns by age group also differ between families below and above the poverty line. Among the poor, the median wealth profile by age group is almost flat, rising by 34 percent from the young to the middle-aged, and by another 6 percent from the middle-aged to the elderly. Among families

above the poverty line, median wealth among the middle-aged was triple that among the families under 35, and the median wealth of the elderly was about equal to that of the middle-aged.

As a result, relative wealth between the poor and non-poor declines sharply with age. The ratio in mean net worth between poor and non-poor families under 35 is 0.36, considerably higher than the overall ratio in mean net worth. This is almost entirely due to the greater weight of durables and inventories in the household portfolio of the young.

If these assets are excluded, the ratio in fungible net worth between the two groups is 0.18, about the same as the corresponding ratio across all age groups. The ratio in mean net worth between poor and non-poor families in the 35-64 age group is 0.31, slightly higher than that across all age groups. This somewhat higher ratio is almost entirely attributable to the very high value of unincorporated business equity and investment real estate among the poor families in this age group. In fact, the ratio of fungible net worth between these two age groups is 0.27, considerably higher than the corresponding ratio across all age groups.

Among the elderly, the ratio of the average net worth of the poor to that of the non-poor is 0.16, considerably lower than the corresponding ratio across all age groups and about equal to the ratio of mean family income between the poor and non-poor elderly. The ratio in fungible net worth between the poor and non-poor elderly is only 0.11. The lower relative wealth holdings of the elderly poor are almost entirely due to the low value of their investment real estate, unincorporated business equity, and financial securities, stocks, and other assets.

The ratio in median wealth holdings among poor and non-poor families also drops off sharply between young families and middle-aged families, from 0.42

to 0.19, and then remains almost the same among elderly families. The median value of fungible wealth among poor families was zero for each age group. In contrast, the median value of fungible wealth increased sharply with age among families above the poverty line.

The results do not lend themselves to a straightforward life-cycle interpretation. One reason is that families do change in poverty status over their lifetime, so that the two groups are not necessarily mutually exclusive over the life cycle. The second is that even if the two populations were distinct, the results suggest that neither the poor nor the non-poor have an age-wealth profile as predicted by the life-cycle model. For the poor, the age-mean wealth profile is hump-shaped, as predicted by most variants of the life-cycle models, but the age-median wealth profile is not. For the non-poor, neither mean wealth nor median wealth follows a hump-shaped profile with respect to age. However, what the results do strongly suggest is that families above the poverty line can and do, on average, accumulate wealth with age, whereas poor families do not, on average, accumulate wealth with age, most likely because they do not have the means.

The Annuitized Value of Wealth and the Wealth of the Land Poor

Another way of looking at the wealth holdings of the poor is to convert those holdings into a perpetual annuity at a given interest rate. For this purpose, it makes sense to use only fungible net worth. Three different interest rates are used: 3 percent, 5 percent, and 7 percent. It is assumed, for simplicity, that the annuity is paid like a bond coupon rather than as a reverse mortgage.

The first issue to address is how the poverty rate would be affected if annuities were paid out on fungible wealth and this annuity were added to

family income. The family poverty rate calculated from the SCF based on family income is 12.6 percent. At a 3 percent interest rate, the average annuity would amount to 10 percent of the average family income of the poor and the adjusted poverty rate would be 11.8 percent; at a 5 percent interest rate, the ratio of average annuity to family income would be 0.16 and the adjusted poverty rate would be 11.6 percent; at a 7 percent interest rate, the annuity-to-income ratios would be 0.23 and the adjusted poverty rate 11.1 percent. This procedure overstates the reduction in the poverty rate that would occur from annuitizing fungible wealth, since these assets already produce income in the form of rent, interest, dividends, and small business profits. If property income is subtracted from the sum of family income and the annuity value of fungible wealth, the adjusted poverty rate becomes 12.1 percent at a 3 percent interest rate, 11.6 percent at a 5 percent interest rate, and 11.1 percent at a 7 percent interest rate.

The second issue to address is the relative number of poor families who have high wealth relative to their income. These can be thought of as the so-called "land poor," who are rich in assets but poor in income. At a 3 percent annuity rate, only 15 percent of the poor had an annuity-income ratio that exceeded 0.20 and only 6 percent had a ratio that exceeded 0.50. At a 5 percent annuity rate, 20 percent of poor families had an annuity-income ratio greater than 0.20 and 10 percent greater than 0.50. At a 7 percent annuity rate, the respective percentage of poor families was 25 percent and 14 percent. Thus, it appears that only a relatively small percentage of the poor have a relatively high amount of fungible wealth.

Another way of estimating the extent of riches among the poor is to measure the overlap in the size distribution of wealth between the poor and

the non-poor. In fact, there is very little overlap between the two distributions. Only 9 percent of the families in the poverty sample had net worth greater than or equal to the median net worth of the non-poor, and only 20 percent of poor families had net worth exceeding half the non-poor median.

It is instructive to look at the wealth holdings of the top 10 percent of the wealth distribution of poor families. The mean net worth of this group was \$202,000, almost twice the mean wealth of all the non-poor, and their average fungible wealth was \$187,000, over twice that of all the non-poor. For the "rich poor," home equity averaged \$79,000, or 39 percent of their fungible wealth. Unincorporated business equity averaged \$73,000, considerably above the mean value of this component for the non-poor, and investment real estate averaged \$27,000. Together, unincorporated business equity and investment real estate composed 49 percent of the fungible wealth of the "rich poor," and 39 percent of them held one or the other investment. Thus, it appears that about 10 percent of the poor are relatively well-off in regard to fungible wealth, and 4 to 5 percent of the poor are land poor in the sense of owning a very high value of business assets with low income.

Inequality of Wealth among the Poor

Another issue of interest is whether the degree of wealth inequality among the poor is greater than that among families above the poverty line. Gini coefficients are computed for net worth for families below and above the poverty line (see the last line of each page of Table 4). The Gini coefficient for wealth among all poor families is 0.60, slightly lower than the corresponding Gini coefficient for families above the poverty line. Among both poor and non-poor families, the top quintile held 67 percent of the total wealth of their group. However, the bottom quintile among families above the poverty line held only 2 percent of their total wealth, compared to a 5

percent share for the bottom quintile among poor families. Among poor families, 0.7 percent had negative net worth and 2.4 percent had net worth less than \$4,000. Moreover, about half had zero or negative fungible net worth. In contrast, 0.5 percent of non-poor families had negative net worth, 0.7 percent had net worth under \$4,000, and only 16 percent had zero or negative fungible net worth.

Relative wealth inequality varies considerably by age group. For families under 35 of age, wealth disparity among the poor is much lower than that among families above the poverty line. The same holds true among the elderly. However, among the middle-aged, wealth inequality is considerably greater among poor families than among the non-poor. These results suggest that there is probably a much greater mixture of temporary and persistent poverty among the middle-aged poor than among the young or elderly poor.

V. Pension and Social Security Wealth

Two other forms of wealth were added to the household portfolio: pension wealth and social security wealth. These two forms differ from those components of wealth shown in Table 3, since they have neither a market value nor a cash surrender value. Following Feldstein (1974), their valuation is based on the present value of the expected income flows emanating from these sources. (See the Appendix for details and Wolff, 1983, for a methodological discussion.)

Five percent of the poverty sample reported that they were receiving benefits from private and government pensions, compared to 12 percent of the non-poor (see Table 5). Since 36.0 percent of poor families had at least one family member 65 or over, in contrast to 41.1 percent of non-poor families, this means that 15 percent of elderly poor families received some form of

Table 5
Estimates of Mean Pension Wealth and Social Security Wealth

	Below the Poverty Line		Above the Poverty Line				Ratio of Col(3)/Col(6)
	(1) Current Recipients	(2) Future Recipients	(3) Current and Future Recipients ^a	(4) Current Recipients	(5) Future Recipients	(6) Current and Future Recipients	
A. Pension Wealth							
1. Proportion of families who are recipients	0.053	0.066	0.112	0.115	0.258	0.367	0.31
2. Mean Value for Recipients							
a) r = 0.0	\$27,440	\$59,231	\$49,261	\$137,714	\$199,662	\$188,578	0.26
b) r = 0.01	24,350	43,808	37,900	125,182	157,785	149,859	0.25
c) r = 0.02	21,785	31,772	29,485	114,418	127,401	123,783	0.24
d) r = 0.03	19,637	23,143	23,302	105,097	101,723	103,727	0.22
B. Social Security Wealth							
1. Proportion of families who are recipients	0.189	0.635	0.812	0.144	0.848	0.958	0.85
2. Mean Value for Recipients							
a) r = 0.0	\$73,963	\$78,790	\$78,203	\$94,077	\$105,228	\$104,542	0.75
b) r = 0.01	66,908	54,811	65,584	87,304	81,436	87,463	0.75
c) r = 0.02	60,876	38,804	56,204	81,263	64,153	74,550	0.75
d) r = 0.03	55,687	28,006	49,067	75,853	51,404	64,593	0.76

Note: Both forms of wealth are estimated at present value of expected benefits. "r" indicates net discount rate.
a. Not the sum of columns (1) and (2) or (4) and (5), because in some families one member may already be a recipient while another expects to be a recipient.

private or government pension, in contrast to 28 percent of the non-poor elderly. Only 7 percent of poor families reported that they expected some form of pension benefits when they retired, in comparison to 26 percent of families above the poverty line. Altogether, 11 percent of poor families were currently receiving or expected to receive pension benefits, in comparison to 37 percent of non-poor families. Thus, over three times the relative number of non-poor families reported some form of pension wealth.

Among both current and expectant (future) holders of pension wealth, there was a very large difference in the mean value of pension wealth between poor and non-poor families. Among current beneficiaries, the mean value of pension wealth for poor families was \$27,000, at a zero percent net discount rate (r), while among families above the poverty line who received pension benefits, the mean was \$138,000. At a zero percent discount rate, pension wealth is the product of annual benefits and (conditional) life expectancy. Average life expectancy was about two years greater for poor pension recipients than for non-poor pension recipients.⁵ Therefore, this fivefold difference in average pension wealth is due almost exclusively to the difference in annual pension benefits.

Pension wealth estimates for future pension beneficiaries are based on the respondent's own estimate of expected benefits and of age of retirement. In this case, there was a threefold difference in mean pension wealth between non-poor and poor beneficiaries at a zero percent discount rate.⁶ Altogether, average pension wealth among both current and future beneficiaries was about four times greater among families not in poverty than among poor families.

As the discount rate rises, the mean value of pension wealth declines for all components. The depreciation of pension wealth with higher discount rates

is far greater for pension wealth among future beneficiaries than that among current beneficiaries, because of the greater number of years to wait. Among poor families who expect pension benefits, the average value of their pension wealth declines by over 60 percent as the discount rate increases from zero to three percent. The overall ratio of mean pension wealth between poor and non-poor pension wealth holders declines from 0.26 to 0.22 as the discount rate increases from zero to 3 percent.

Social security wealth was much more widely held among both poor and non-poor families than was pension wealth. Nineteen percent of poor families were currently receiving social security benefits. Moreover, in 64 percent of poor families, the husband or wife expected to receive social security benefits when retired. Altogether, 81 percent of poor families either were currently receiving or expected to receive social security benefits.⁷ Among families above the poverty line, 14 percent were currently receiving benefits, 85 percent were expecting benefits in the future, and 96 percent were either currently receiving or expecting benefits. The ratio in social security coverage rates between the poverty sample and the non-poverty sample is 0.85, considerably higher than the corresponding ratio in pension coverage rates. Moreover, among families with at least one family member aged 65 or over, 53 percent of those below the poverty line currently received social security benefits, compared to 35 percent of families above the poverty line.

The ratio of mean social security wealth among such wealth holders in the poverty sample to those in the non-poverty sample is considerably higher than the corresponding ratio in pension wealth. Among current recipients, the ratio in mean social security wealth between the two samples, at a zero percent discount rate, is 0.79. This difference is almost entirely due to the difference in annual social security benefits, since average life expectancies

were very close in the two samples. The ratio of mean social security wealth between the two samples among future recipients is 0.75, and this is due almost entirely to differences in future expected annual benefits. Altogether, the ratio in mean social security wealth among current and future beneficiaries in the two samples is about three fourths, and this ratio is almost invariant across discount rates.

Table 6 presents a final comparison of extended household wealth W^* , where W^* is defined as the sum of marketable wealth W , pension wealth $PENWLTH$, and social security wealth $SSWLTH$. The ratio of the mean value of marketable wealth between poor families and non-poor families is 0.28. At a zero percent discount rate, mean pension wealth among poor families was \$5,500; among non-poor families, it was \$69,000; and the ratio in mean pension wealth between the two samples is 0.08. This large difference is due in almost equal measure to the relatively small percentage of pension recipients among the poor and to the low average value of pension holdings among recipients. Among the poor, the average holdings of pension wealth were 18 percent of their marketable wealth holdings, whereas in the non-poverty sample that share was 63 percent. The ratio in average social security wealth between the two samples is 0.63, considerably higher than the ratio of pension wealth. The average value of social security wealth among the poor was 12 times that of pension wealth and twice that of marketable wealth. Among families above the poverty line, average holdings of social security wealth were about equal to marketable wealth and 45 percent higher than pension wealth.

The effects of pensions and social security on the relative wealth of the poor can now be determined. The addition of pension wealth to the household portfolio reduces the ratio of mean wealth between the poor and the non-poor

Table 6
 Mean Wealth Holdings by Poverty Status and Age, with Pension Wealth
 and Social Security Wealth Included

	All Ages			Under 65			65 or Over		
	Poor	Non-Poor	Poor/ Non- Poor	Poor	Non-Poor	Poor/ Non- Poor	Poor	Non-Poor	Poor/ Non- Poor
1. Marketable Net Worth (W)	\$30,350	\$109,945	0.28	\$31,648	\$99,162	0.32	\$26,313	\$166,650	0.16
2. Discount Rate r = 0.00									
(a) PENWLTH	5,517	69,208	0.08	6,621	75,278	0.09	1,385	50,476	0.03
(b) SSWLTH	63,501	100,151	0.63	72,355	109,691	0.66	35,230	81,204	0.43
(c) W + PENWLTH	35,867	179,153	0.20	38,269	174,440	0.22	27,698	217,126	0.13
(d) W + PENWLTH + SSWLTH = W*	99,368	279,304	0.36	110,624	284,131	0.39	62,928	298,330	0.21
3. Discount Rate r = 0.01									
(a) PENWLTH	4,245	54,998	0.08	5,094	56,401	0.09	1,322	47,307	0.03
(b) SSWLTH	53,254	83,790	0.64	59,611	85,968	0.69	33,243	75,935	0.44
(c) W + PENWLTH	34,595	164,943	0.21	36,742	155,563	0.24	27,635	213,957	0.13
(d) W + PENWLTH + SSWLTH = W*	87,849	248,733	0.35	96,353	241,531	0.40	60,878	289,892	0.21
4. Discount Rate r = 0.02									
(a) PENWLTH	3,302	45,428	0.07	3,895	45,612	0.09	1,262	44,422	0.03
(b) SSWLTH	45,638	71,419	0.64	50,362	70,617	0.71	31,416	72,144	0.44
(c) W + PENWLTH	33,652	155,373	0.22	35,543	144,774	0.25	27,575	211,072	0.13
(d) W + PENWLTH + SSWLTH = W*	79,290	226,792	0.35	85,905	215,391	0.40	58,991	283,216	0.21
5. Discount Rate r = 0.03									
(a) PENWLTH	2,610	38,068	0.07	3,018	37,389	0.08	1,205	41,789	0.03
(b) SSWLTH	39,842	61,880	0.64	43,261	57,723	0.75	29,735	67,781	0.44
(c) W + PENWLTH	32,960	148,013	0.22	34,666	136,551	0.25	27,518	208,439	0.13
(d) W + PENWLTH + SSWLTH = W*	72,802	209,893	0.35	77,927	194,274	0.40	55,036	276,220	0.20

population from 0.28 to 0.20. The addition of social security wealth to the household portfolio has the opposite effect from that of pension wealth, raising the ratio of average wealth from 0.20 to 0.36. The net effect of adding both pension wealth and social security wealth to the household portfolio is equalizing: doing so raises the ratio of mean wealth between the two samples from 0.28 to 0.36. This result is virtually invariant across discount rates.

Table 6 also disaggregates the average wealth holdings between families under 65 and those 65 or over. The disparity in average pension wealth and social security wealth holdings between poor families and families above the poverty line is considerably less for families under 65 than for the elderly.⁸ Among families under 65, the addition of pension and social security wealth to the household portfolio narrows the gap in relative wealth holdings between poor and non-poor families from 0.32 to about 0.40. Among the elderly, the gap is narrowed from 0.16 to only about 0.20. Thus, relative wealth inequality between the poor and non-poor remains greatest for the elderly even after the addition of retirement wealth to household wealth.

VI. Summary and Conclusion

The most important finding of this study is that families below the poverty line are better off in terms of household wealth than in terms of income relative to families above the poverty line. The ratio of mean net worth between the two groups is 0.28, compared to a ratio of 0.17 in mean family income. The ratio in median net worth between the two groups is 0.30, compared to a ratio of 0.20 in median family income. However, the ratio of mean fungible net worth between the two groups is 0.19, comparable to the relative income between the two groups. About half of poor families had zero

or negative fungible net worth, compared to 16 percent of the non-poor. Moreover, because of underreporting biases, it is very likely that these figures overstate the relative wealth of the poor by 2 to 4 percentage points.

Thirty-one percent of the poor owned their own home, in comparison to 66 percent of non-poor families, and the ratio of mean home values among homeowners in the two samples is about half. Moreover, almost half of poor families owned at least one vehicle, in comparison to 90 percent of non-poor families, and the ratio of their mean value is also about a half.

As a result, the average portfolio composition of wealth is quite different among the poor as opposed to the non-poor. The poor held 77 percent of their net worth in the form of home equity, durables, and inventories, compared to 52 percent for non-poor families. The ratio of the average value of such holdings between the two groups is over 40 percent. The only other appreciable assets held by the poor were unincorporated business equity and investment real estate, which amounted to 22 percent of their average net worth. In contrast, for non-poor families, 26 percent of their net worth was held in these two forms and 23 percent took other forms. Moreover, if we exclude both home equity and durables and inventory from wealth, the ratio of the remaining net worth between the two groups is 0.13. Finally, 33 percent of poor families had non-mortgage debt, compared to 58 percent of all families, but the ratio of non-mortgage debt to net worth is actually higher among poor families than among others. This result suggests that poor families do not face severe credit constraints.

Average wealth patterns differ considerably among poor and non-poor families. Mean wealth increases with age among the latter, whereas among the poor, mean wealth is greatest for the 35-to-64 age group and considerably lower for the age group over 64. As a result, the ratio in mean net worth

between the poor and non-poor is considerably lower among the elderly than among the non-elderly. The ratio in average net worth between the poor and the non-poor is about the same for families under 35 as those 35 to 64, though the ratio of fungible net worth is considerably lower among the young than among the middle-aged.

Only about 10 to 15 percent of families below the poverty line have significant wealth. Only about 5 percent of the poor are "land-poor" in the sense of having a very high value of business assets. As a result, incorporating an annuity flow from fungible wealth as part of family income has a minimal effect on the computed poverty rate.

The inequality of wealth, as measured by the Gini coefficient, is slightly lower among poor families than among families not in poverty. Among young families and elderly families, wealth disparity is considerably less among the poor than among families above the poverty line. However, among middle-aged families, wealth inequality is considerably greater among poor families than the non-poor.

The inclusion of pension wealth in the household portfolio increases relative wealth inequality between the poor and the non-poor. Only 11 percent of poor families had pension wealth, compared to 37 percent of non-poor families. Moreover, mean pension wealth holdings among current and future recipients were much smaller for poor families than for the non-poor. As a result, the addition of pension wealth to fungible wealth reduces the ratio of mean wealth holdings between poor and non-poor families on the order of 30 to 40 percent.

Social security wealth is much more prevalent among the poor than pension wealth. Moreover, its average value among poor social security wealth holders

was three fourths that of the non-poor. The addition of social security wealth to the household portfolio has a pronounced equalizing effect on the relative wealth holdings between those in poverty and those not in poverty. The net effect of the addition of both pension and social security wealth to marketable wealth is to increase the ratio of average wealth holdings between the two groups from 0.28 to about 0.35. For families under 65, the gap is closed from 0.32 to 0.40. However, among the elderly, the gap is closed from 0.16 to only 0.21. Thus, the social security system has made a significant contribution to improving the relative well-being of the poor, particularly the non-elderly poor, though much of its effect is to offset the disequalizing influence of the private pension systems.

Appendix: Definition of Income and Wealth and Data Sources

A. Family Income

SCF family income is for 1982 and has the following components:

1. Wages and salaries
2. Net income from unincorporated businesses, farms, partnerships, professional practices
3. Interest income (including that from IRA'S)
4. Dividends
5. Net capital gains from sale of stocks, bonds, and real estate
6. Rent, trust income, and royalty income
7. Workers[†] or unemployment compensation
8. Child support, alimony, inheritance, gifts, and financial support from friends and relatives
9. ADC, AFDC, food stamps, SSI, other public assistance
10. Retirement, annuity, pension, disability, and survivors' benefits
11. Other income

Census income is equal to SFC income less capital gains, gifts, food stamps, and other non-monetary assistance. I was able to identify capital gains directly, but gifts, food stamps, and other non-monetary assistance were included in other categories and could not be identified directly. The poverty line calculations were thus based on SCF income less capital gains. Poverty line definitions were based on income, size of family unit, householders 65 and over, and the number of related children under 18. The poverty line figures for 1982 were obtained from U.S. Bureau of Census, Current Population Reports, Series P-60, No. 144, Characteristics of the Population Below the Poverty Line: 1982, U.S. Government Printing Office,

Washington, D.C., 1984, p. 181.

B. Household Balance Sheets for 1983

Table A.1 shows my estimate of the 1983 household balance sheet based on aggregate data from published sources and corresponding totals from the SCF. All entries in Table A.1 are available in some form in the SCF, except for the categories other consumer durables and inventories. Some assets and liability information in the SCF database required special imputations. Details on the technical definitions of each entry in Table A.1 are as follows:

1. Owner-Occupied Housing and Other Real Estate. Current market values of both single-family houses owned and occupied by individual families and of multiple housing units owned and occupied, in part, by the family were provided in the SCF. These were based on estimates provided by the family. In the case of multiple housing units partially occupied by the family, the value of the owner-occupied portion was estimated as the ratio of the value of the building to the total number of housing units in the building. The value of the non-owner-occupied portion was included in the "other real estate" category. To this category was also added the value of all other real estate owned by the family.

2. Automobiles and Vehicles. Information was provided in the SCF of the number of vehicles owned (up to three), the original cost of the vehicle, the date the vehicle was purchased, and whether the car was new when purchased. From Young and Musgrave (1976), a 10-year service life was assumed and straight-line depreciation was used to obtain the current value of the vehicle in dollars of the year of purchase. (If the vehicle was 10 years or older, its current value was estimated as $1/(n+1)$ multiplied by its original purchase price, where n is the age of the vehicle.) The (undepreciated) value of the vehicle was then inflated to 1983 prices. For vehicles purchased when new, the price index

Table A.1

Aggregate National Balance Sheet of Household Wealth for the U.S., 1983, by Item,
in Billions of Dollars

Item	(1) Published Data Sources	(2) SCF	Ratio (2)/C1)
I. Assets	11,799.4	—	
A. Tangible Assets	4,477.2	—	
1. Owner-occupied Housing	2,309.7	3,458.3	1.50
2. Other Real Estate	628.8	1,113.1	1.77
3. Automobiles and Vehicles	388.5	437.6	1.13
4. Other Consumer Durables	896.4	—	—
5. Inventories	253.8	—	—
B. Fixed Claim Assets	2,959.1		
1. Demand Deposits and Currency	346.1	133.8	0.39
2. Time and Savings Deposits and Money Market Funds	1,841.7	746.2	0.41
3. Financial Securities	771.3	218.3	0.28
C. Equities Held	4,363.1		
1. Corporate stock	1,478.4	670.2	0.45
2. Unincorporated Business/Equity	2,273.8	977.2	0.43
3. Trust Fund Equity	348.2	90.0	0.26
4. Insurance (Cash Surrender Value)	214.6	86.4	0.40
5. Pensions (Cash Surrender Value)	48.1	36.6	0.76
II. Liabilities	1,849.5		
1. Mortgage Debt	1,179.5	710.0	0.60
2. Other Debt	670.0	156.7	0.23
III. Net Worth	9,949.9		

(table notes on next page)

NOTES:
Column (1):

- All assets and liabilities valued as of end of 1983. The 1983 figures were obtained, in part, by extrapolating past time trends. The sources of data are as follows:
- (i) Years 1960-68. Richard Ruggles and Nancy Ruggles, "Integrated Economic Accounts of the United States, 1947-1978," Institute for Social and Policy Studies Working Paper No. 841, Nov. 1980, Table 2.40.
 - (ii) Years 1969-80. Richard Ruggles and Nancy Ruggles, "Integrated Economic Accounts for the United States, 1947-80," Survey of Current Business, 62, No. 5 (May 1982), Table 2.40.
 - (iii) Years 1981-82. Board of Governors of the Federal Reserve System, "Flow of Funds Accounts, Assets and Liabilities Outstanding 1959-82," Aug. 1983. The Ruggles' 1980 data were used as a benchmark and the change in assets and liabilities from the Flow of Funds data were added to 1980 benchmark data. Flow of Funds data include non-profit organizations.
 - (iv) Year 1983. Board of Governors of the Federal Reserve System, "Flow of Funds Accounts, First Quarter 1984," mimeo., May 1984. Basic data are changes in asset and liability values for households, personal trusts, and nonprofit organizations.
 - (v) The split between owner-occupied housing and other real estate for 1960-79 from: John C. Musgrave, "Fixed Capital Stock in the United States: Revised Estimates," Survey of Current Business, 61, No. 2, (Feb. 1981), Table 6, p. 62. Other years from Flow of Funds data, extrapolating past trends, and revaluation from NIPA net residential investment implicit price deflator (Table 7.18).
 - (vi) Split between autos and other consumer durables for 1964-79 from: Survey of Current Business, 61, No. 4 (April 1981), Table 2, p. 64. Others years estimated by extrapolating these time trends. For 1983 consumer price index for durables used to revalue stock of durables estimated from Flow of Funds data.
 - (vii) Inventories updated to 1983 using NIPA personal consumption expenditures on nondurable goods (Table 2.2) and the extrapolated ratio of inventories to nondurable goods expenditures.
 - (viii) Outstanding value of stock in 1983 estimated from Flow of Funds data and revaluation from Standard and Poor's Combined Index for 500 stocks (134 percent appreciation).
 - (ix) Estates and trusts updated to 1983 by extrapolating estates and trusts value as a percentage of value of total financial assets from 1960 to 1980 from Flow of Funds data. (This ratio declined slightly from 1960 to 1980.)

Notes to Table A1 (continued)

- (x) Unincorporated business equity updated to 1983 by extrapolating the ratio of the value of unincorporated business equity to total financial assets from 1960-1980 from Flow of Funds data. (This ratio was virtually constant from 1960 to 1980.)
- (xi) Life insurance and pension reserves are provided separately in Flow of Funds data. Following Ruggles, I estimated the cash surrender value (CSV) of life insurance as 90 percent of its reserves and the CSV of pension funds as 5 percent of its reserves. Figures are then aligned with Ruggles' totals.

Column (2):

SCF aggregates are based on population weights provided in the FRB version of the SCF.

used was that for new vehicles, and for vehicles purchased when used, the price index was that for used vehicles. Both indices were obtained from the Economic Report of the President, 1984, Table B-53. If the information was missing on the original cost of the vehicle, the vehicle was assigned the average current market value as follows:

Vehicle 1: \$5,615
 Vehicle 2: 3,784
 Vehicle 3: 3,189

3. Other Consumer Durables. These were imputed to each household based on the regression shown in Table A.2. These results were obtained from the 1969 MESP database (see Wolff (1980) for a description of the database) and based on 1969 values for consumer durables and income. For the imputation, SCF family income was deflated to 1969 based on the change in the CPI. Consumer durable values were then inflated to 1983 values based on the Consumer Price Index for durables. The resulting consumer durable figures were then aligned to the aggregate household balance sheet total by multiplying each entry in the SCF by a constant adjustment factor.

4. Household Inventories. These imputations were based on Table A.3, which shows the ratio of household inventory expenditures to (before-tax) family income in 1972-73. These same ratios were applied to corresponding 1982 income classes, where the 1972-73 income figures were inflated to 1982 dollars using the Consumer Price Index. The resulting household inventory figures were then aligned to the aggregate household balance sheet total in Table A.1 by multiplying each entry in the SCF by a constant adjustment factor.

Table A.2

Regression of the Stock of Other Consumer Durables on Household Variables^a

Independent Variables	Coefficient	t-Statistic
Constant	2871.4	—
Income	0.08644	32.51
Income**2	-0.3271E-6	17.26
Agehead	-7.1401	5.57
Married ^b	811.32	11.12
Femhead ^c	-240.31	2.99
Urbanres ^d	189.51	3.95
R ²	0.261	
Standard Error	1659.2	
No. of Observations	6345	

a. Regressions run on 1969 MESP database (see Wolff (1980) for a description of the database.) Stock of durables and income variables are both in 1969 dollars.

b. Dummy variable: 1 if married (spouse present or absent).

c. Dummy variable: 1 if head of household is female.

d. Dummy variable: 1 if urban residence.

Table A.3

Expenditures on Household Inventory Items as a Percent
Of Family Income By Family Income Class In 1972-73

1972-73 (Before-Tax) Income Class	Ratio of Inventory Purchases to Family Income
1. Under \$3,000	0.491
2. \$3,000-\$3,999	0.318
3. \$4,000-\$4,999	0.282
4. \$5,000-\$5,999	0.265
5. \$6,000-\$6,999	0.238
6. \$7,000-\$7,999	0.222
7. \$8,000-\$9,999	0.204
8. \$10,000-\$11,999	0.184
9. \$12,000-\$14,999	0.170
10. \$15,000-\$19,999	0.152
11. \$20,000-\$24,999	0.136
12. \$25,000 and over	0.097
Mean: \$11,419	0.172

Source: U.S. Bureau of Labor Statistics, Consumer Expenditure Survey: Integrated Diary and Interview Survey Data, 1972-73, Bulletin 1992, 1978. Household inventory items are defined as (1) food purchased for home use, (2) tobacco, (3) alcoholic beverages, and (4) clothing and clothing materials.

5. Demand Deposits and Currency. This category is from the SCF and includes only the average balance of all checking accounts.

6. Time and Savings Deposits and Money Market Funds. This category also includes IRA and KEOGH account balances, as well as short-term and long-term certificates of deposits.

7. Financial Securities. This includes the following components:

- a. Federal and state and local government bonds, including U.S. savings bonds.
- b. Corporate, foreign, and other bonds.
- c. Mortgage assets held by the family on property sold by the family.

8. Stocks. This includes publicly traded stocks (including investment clubs), mutual funds, and call money accounts at stock brokerage firms.

9. Unincorporated Business Equity. This is the reported total dollar value of unincorporated businesses, farms, partnerships, and professional corporations owned by the family. Also included here is the net amount of money the unincorporated business owes to the family.

10. Trusts. This component is defined as the family's interest in trust or investment accounts.

11. Insurance Cash Surrender Value. This is directly provided in the SCF.

12. Pension Cash Surrender Value. This is defined as the total dollar amount accumulated in individual's pension accounts that can be withdrawn today.

13. Miscellaneous Assets. This has two components: (i) other investments, consisting of boats, money lent to friends and relatives, antiques, precious metals, jewelry, and art; and (ii) the cash surrender value of company savings plans, including thrift, profit-sharing, stock options, ESOPs, annuity plans, and credit unions.

14. Mortgage Debt. This includes the following components:

a. Total mortgage loans outstanding on housing and other real estate. This was estimated from mortgage tables based on the following information provided by the SCF: (i) original mortgage loan; (ii) payment amount and schedule; (iii) date of original loan; and (iv) interest rate.

b. Total loans outstanding on all vehicles owned.

c. Money owed on other investments.

d. Installment loans outstanding on durables (except vehicle) and other large purchases. Information in the SCF was provided on the following: total number of payments to be made on the loan (N_1); number of payments made to date (N_2); and the value of the original loan (L). The outstanding loan was approximated by: $L(1 - N_2/N_1)$.

e. Debt remaining on all other loans.

Comparison of Balance Sheet Totals.

SCF totals for tangible assets are higher than those that I estimated from published sources. The SCF value for total real estate holdings is 56 percent higher than that estimated from published sources, and the value for vehicles 13 percent higher.

For fixed claim assets, the SCF totals are considerably lower than the corresponding estimates from published sources. For the category as a whole, the SCF total was only 37 percent of the other. A similar picture emerges for fixed claim assets, where the SCF total for the whole category

is only 43 percent of the corresponding total from published sources. On the liability side, the results are mixed. For mortgage debt, the SCF total is 40 percent lower than the estimate from published data. For the other debt, the SCF total is less than a quarter of the other.

C. Pension and Social Security Wealth

For purpose of analysis, two components of non-marketable wealth were imputed to each family in the SCF: "pension wealth" and "social security wealth." The valuation of these two assets is based on expected income flows. As a result, these imputations are subject to much greater uncertainty and error than the other imputations.

1. Pension Wealth. Two forms of pension wealth were estimated. The first, PENWLTH1, is based on actual pension benefits received in 1982 and is the more certain of the two. This was estimated as follows:

Let

PBR = actual pension benefits received in 1982

LE = life expectancy in number of years, conditional on age, sex, and race. (The source is the 1985 Statistical Abstract, p. 70. The data are based on 1981 vital statistics.)

r = net discount rate. Zero, one, two, and three percent were used.

A word should be said about the net discount rate, r. The present value of pension benefits to be received in t years from now, $PVPB_t$, is given by

$$PVPB_t = PBR \cdot e^{(g - p - r^*)t}$$

where g is the rate of growth of the nominal pension benefit, p is the rate of change of the CPI, and r* is the real discount rate. Unfortunately, none

of these three parameters is known. From the data in the November 1984 version of the SCF, we do not know whether the pension benefits are indexed or not. (This information will be available in a later version of the SCF.) If PBR is fixed in normal terms, $r = p + r^*$. If PBR is indexed to the CPI, then $r = r^*$. For any other permutation, $r = p + r^* - g$. A range of 0 to 3 percent is used for p , since this has historically been the approximate range of real interest rates in the U.S. With this in mind, then,

$$\text{PENWLTH1} = \int_0^{\text{LE}} \text{PBR} e^{-rt} dt$$

The second form of pension wealth, PENWLTH2, is based on the expected pension benefits to be received at retirement and the expected age of retirement. This information is based on the respondent's expectations, which makes it rather uncertain. Moreover, it is unclear from the questionnaire whether future pension benefits are estimated in 1983 dollars or the dollars of the expected age of retirement. As a result, the net discount rate r must be loosely interpreted. (In a later version of the SCF, more precise information will be available on future pension benefits.) Let:

A = current age (in 1983)

AR = expected age of retirement

PBE = expected annual pension benefits at age of retirement

PLE = expected lump sum pension payment at time of retirement

and the other symbols as above. Then,

$$\text{PENWLTH2} = \int_A^{\text{AD}} \text{PBE} e^{-r(t-A)} dt + \text{PLE} e^{-r(\text{AR}-A)}$$

where $\text{AD} = A + \text{LE}$ is the expected age of death.

2. Social Security Wealth. Two forms of social security wealth were estimated, which are analogous to the two forms of pension wealth. The

same qualifications and reservations apply to social security wealth as to pension wealth. Let

SSBR = actual social security benefits received in 1982

SSBE = expected social security benefits at age of retirement

Then,

$$\text{SSWLTH1} = \int_0^{\text{LE}} \text{SSBR} e^{-rt} dt$$

$$\text{SSWLTH2} = \int_{\text{AR}}^{\text{AD}} \text{SSBE} e^{-r(t - A)} dt$$

NOTES

1. Unless otherwise indicated, all citations indicated by "CPR" refer to U.S. Bureau of the Census, Current Population Reports, Series P-60, No. 144, Characteristics of the Population Below the Poverty Level: 1982, U.S. Government Printing Office, Washington, D.C., 1984.
2. There also appear to be two additional biases from differences between the SCF and Census income definitions. First, food stamps and other non-cash transfers are included in the SCF definition of income but are excluded from the Census definition. Second, I included the income category "child support, alimony, inheritances, gifts, and financial support from friends and relatives" in arriving at the SCF definition of income, whereas the Census definition excludes gifts and inheritances. The inclusion of these two income categories should have biased downward the estimated poverty rate from the SCF. However, it is likely that these two components were severely underreported in the SCF (see below and the Appendix for more details).
3. The CPR (Table 31) reports a median family income among poor families of \$5,063, which is 10 percent greater than my estimate.
4. Avery, Elliehausen, Canner and Gustafson (1984) report a homeownership rate of 36 percent for families with family income of \$9,999 or less, based on the SCF. The reason for my lower figure is not immediately apparent.
5. It should be noted that life expectancy figures are not conditional on income. If they were, it is quite likely that life expectancy estimates for members of poor families would be considerably less than for members of rich families of comparable age, race and sex.
6. At a zero percent net discount rate, PENWLTH2, pension wealth for future beneficiaries is the product of expected annual pension benefits (PBR) and the difference between life expectancy (LE) and the expected number of years to retirement (RE).

$$\text{PENWLTH2} = \text{PBR} (\text{LE} - \text{RE})$$

(also see pages A11 and A12 of the Appendix). The difference (LE - RE) was about the same for the two samples, because expectant pension beneficiaries among the poor were older than among the non-poor and, hence, both LE and RE were smaller.

7. The estimate of the percent of families who expected to receive social security benefits was based on the number of families with a respondent or spouse who had previously contributed to or were currently contributing to the social security system but were not currently retired. This approach was used instead of basing this estimate on the number of families who reported that they were expecting social security benefits at some future date, since the response rate to this question was very low. It should be noted that, like pension beneficiaries, the

- number of families currently receiving or expecting social security benefits is less than the sum of the number of families currently receiving benefits plus the number expecting benefits, since a family may have one spouse currently receiving benefits and another expecting to receive benefits.
8. It should be noted that pension wealth estimates for individuals under 40 are particularly unreliable, because of lack of knowledge about pension plans and uncertainties about future employment. However, this unreliability should apply equally to poor families and non-poor families and should not bias the relative wealth holding statistics.

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