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WEALTH HOLDINGS AND POVERTY STATUS IN THE U.S.

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Families below the poverty line are better off in terms of wealth than income. In 1962, the ratio of mean income between families below and above the poverty line is 0.19 and the ratio of mean wealth is 0.29. The corresponding ratios for 1983 are 0.16 and 0.19. On average, the elderly poor are better off in terms of wealth than the younger poor, particularly relative to their own income. However, the poor have become worse off in terms of wealth between 1962 and 1983, when their real income grew by 6 percent and their real wealth declined by 11 percent. The inclusion of pension and social security wealth in the household portfolio narrows the wealth gap between the poor and non-poor, particularly for families under 65 years of age. Alternative poverty rates are also calculated based on the inclusion of annuity flows from wealth in household income. The reduction in the poverty rate between 1962 and 1983, from 21 to 15 percent on the basis of the official rate, is considerably lower with these alternative definitions.

I. INTRODUCTION

Recent work on poverty has focused on its persistence among families. Bane and Ellwood (1986) have estimated the dynamics of poverty spells among families. Beach (1977) and 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. Holden, Burkhauser and Myers (1985) have investigated the dynamics of poverty among the elderly. Most recently, Ruggles and Williams (1989) have estimated the duration of poverty spells using monthly data. The findings of Bane and Ellwood and those of Ruggles and Williams indicate that most families who enter poverty have only a short stay in poverty. On the other hand, the majority of families that are poor at a given point of time will have a protracted spell of poverty before they escape.

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 a joint index of family income and wealth, since wealth reflects accumulated lifetime income (to the 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 phenomenon, based on a temporary

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period of unemployment, illness, or the like, or a recent change in family status, such as divorce. These families may have relatively high wealth. For others, poverty may be a more or less persistent feature of their life history. Such families may consist of a single 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. In this paper I present new findings on wealth holdings of the poor. One implication of this work is to assess the persistence of poverty among the poor.

Several other issues are also addressed. First, how do the relative wealth holdings of families below and above the poverty line compare to that of income? Second, how does the composition of wealth vary between the two groups? In particular, are the poor able to accumulate liquid and investment wealth or does their wealth largely go towards satisfying immediate consumption needs and thus take the form of housing and consumer durables? Do poor families face severe credit constraints on borrowing and thus have a lower debt-equity ratio than families above the poverty line?

Third, how do the relative wealth holdings of the poor, both in terms of level and composition, vary with age? Is the disparity between relative wealth holdings and relative income between families below and above the poverty line greater for elderly families than for younger ones? Fourth, does pension and social security wealth widen or narrow the gap in relative wealth holdings between the poor and non-poor?

In this study I also propose several new measures of poverty status based on combined indices of income and wealth. In one set of calculations, household wealth is converted into an annuity flow and this annuity is included as part of family income. In a second set, imputed rent to owner-occupied housing is also included as part of household income. In a third set, a joint criterion of low income and low wealth is used to determine poverty status. The results show that calculations of the poverty rate can be quite sensitive to the definition used.

The results are based primarily on the 1983 Federal Reserve Board's Survey of Consumer Finances (SCF). The sample consists of 4,262 families, containing the so-called high-income supplement. The version used here contains imputations for missing values made by the Federal Reserve Board. In addition, wealth entries are adjusted to align with national balance sheet totals [see Wolff (1987a) for details]. 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. Some comparative results are also shown based on the 1962 Survey of Financial Characteristics of Consumers (SFCC). This has a sample of size of 2,557 families, includes the Federal Reserve Board's imputations for missing values and is stratified by income. Wealth entries for the 1962 data are also adjusted to align with national balance sheet totals [see Wolff (1987a) for details].

The remainder of the paper is divided into six parts. In Part 2 comparisons of family income by source for the populations above and below the poverty line for 1982 are presented. In Part 3, results are given on the relative wealth holdings of the poor and the non-poor populations in 1983. In Part 4 the 1983 household balance sheet is extended to include pension and social security wealth. Comparable results for 1962 are presented in Part 5. Alternative calculations of the poverty

rate based on both family income and wealth are developed in Part 6. Concluding comments are made in the last section of the paper.

II. Comparative Income Statistics

Before the analysis is begun, it is useful to compare SCF results with data from the Current Population Reports (CPR) 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. Calculations from the SCF indicate a poverty rate of 14.2 percent for families. On the other hand, the official poverty rate for individuals is 15.0 percent, compared to a 14.9 percent rate calculated from the SCF. The apparent difference between the two sources is the underrepresentation of singles and unrelated individuals in the SCF.

Panels 2 and 3 of Table 1 show a comparison of mean income by component for the full population and the poor, as reported in the CPR and the SCF. Total

TABLE 1

A Comparison of Income Data between the Current Population Reports and the Survey of Consumer Finances

	CPR[a] (Families)	SCF (Households)	Ratio of SCF/CPR
1. Poverty rate			
(a) Individuals	0.150	0.149	0.99
(b) Families (households)	0.122	0.142	1.16
2. Mean family (household) income by type, for all families			
(a) Wage and salary income	$20,543	$17,451	0.85
(b) Self-employment income	1,643	3,442	2.10
(c) Dividends, interest, and rent[b]	1,753	2,800	1.60
(d) Social security[c], pensions, annuity, alimony, and other income	2,739	2,779	1.02
(e) Other transfer income[d]	685	524	0.77
(f) Total family income	27,390	27,039	0.99
3. Mean family (household) income by type, for families below the poverty line			
(a) Wage and salary income	2,329	1,799	0.77
(b) Self-employment income	65	154	2.37
(c) Dividends, interest, and rent[b]	105	85	0.81
(d) Social security[b], pensions, annuity, alimony, and other income	1,059	1,447	1.37
(e) Other transfer income[d]	1,591	1,473	0.93
(f) Total family income	5,019	4,958	0.99

[a]The 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. Income data for both sources are for 1982.

[b]In the SCF, this entry also includes trust income.

[c]Social security income includes retirement and survivors' benefits, permanent disability insurance payments, and railroad retirement benefits.

[d]In the CPR, this entry is defined as the sum of AFDC, SSI, unemployment 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.

income is almost identical in the two samples, and most individual components are quite close. Wage and salary income and self-employment income differ between the two sources, but total labor income (the sum of the two) is quite close. However, property income is higher in the SCF, a result which is likely due to the stratified sample used in the SCF.

In Table 2 comparative income statistics for families below and above the poverty line are presented. Average income among the poor is only 16 percent of that among families above the poverty line. This ratio is identical for families under 65 years of age and for those 65 and over. The ratio in median family incomes between families below and above the poverty line is almost identical to that of mean income among all ages and for those under 65. However, for families 65 and over, the ratio is 0.36. This considerably higher fraction is due to the relatively low median income among elderly families above the poverty line, rather than to a relatively high median income of poor elderly families.

For families under 65, the discrepancy is due mainly to differences in labor earnings. Only 57 percent of poor families reported receiving wage and salary income, compared to 89 percent of families above the poverty line. Among those who worked, the ratio in mean wage and salary earnings between those below and the above the poverty line is 0.16. Seven percent of poor families received self-employment earnings, compared to 17 percent for other families under 65. The ratio in average self-employment income among the self-employed is 0.12. Only 14 percent of poor families received property income, compared to 55 percent of families above the poverty line. Families above the poverty line with property income earned ten times as much dividends, interest, and rent as poor families who reported some form of property income.

The discrepancy in property income is even more pronounced among the elderly. Among poor elderly families, 20 percent received some form of property income, in contrast to 75 percent of other elderly families. Among property income recipients, the ratio in earnings between the two groups is 0.08. Over 90 percent of the elderly poor received some form of social security or pension income. However, elderly families over the poverty line average almost twice as much retirement income as those below the poverty line.

III. Relative Wealth Holdings, 1983

I next compare wealth-holding patterns between families below and above the poverty line in 1983 (see the Appendix for the definition of each component). One of the more surprising findings of this study is the high home-ownership rate among the poor (see Table 3). Overall, 38 percent of families below the poverty line owned their own home in 1983.[1] Among families above the poverty line, the home-ownership rate is 68 percent, almost double that of poor families.

[1]Avery, Elliehausen, Canner and Gustafson (1984) report a similar home-ownership rate, of 36 percent, for families with family income of $9,999 or less, based on the SCF. A further breakdown of home-ownership rates is shown in the addendum to Table 3. Among the elderly poor, the home-ownership rate is 63 percent, while among the non-elderly poor it is 30 percent. Home-ownership rates also vary by geographical area. Among the urban poor, the rate is only 24 percent; in suburban areas it is 41 percent; and in rural areas the rate is 49 percent. Among the elderly poor living in rural areas, the home-ownership rate is almost three-fourths.

TABLE 2

FAMILY INCOME BY TYPE, POVERTY STATUS, AND AGE, 1982

	Proportion of Families Receiving Component			Mean Value of Component for Recipients Only		
	Below Poverty Line	Above Poverty Line	Ratio	Below Poverty Line (in dollars)	Above Poverty Line (in dollars)	Ratio
1. All ages						
(a) Wages and salary	0.442	0.779	0.57	4,070	25,770	0.16
(b) Self-employment	0.051	0.159	0.32	3,020	25,117	0.12
(c) Dividends, interest and rent	0.151	0.582	0.26	563	5,593	0.10
(d) Social security and pension income	0.351	0.283	1.24	3,369	8,700	0.39
(e) Total income	1.000	1.000	1.00	4,958	31,592	0.16
Memo: Median family income				4,038	24,345	0.17
2. Under 65						
(a) Wages and salary	0.572	0.892	0.64	4,165	26,428	0.16
(b) Self-employment	0.067	0.172	0.39	3,073	25,577	0.12
(c) Dividends, interest and rent	0.135	0.546	0.25	403	4,143	0.10
(d) Social security and pension income	0.161	0.132	1.22	3,444	7,897	0.44
(e) Total income	1.000	1.000	1.00	5,326	33,108	0.16
Memo: Median family income				4,600	26,542	0.17
3. 65 and over						
(a) Wages and salary	0.056	0.272	0.21	1,355	16,031	0.08
(b) Self-employment	0.005	0.099	0.05	474	21,927	0.02
(c) Dividends, interest and rent	0.198	0.747	0.27	878	10,397	0.08
(d) Social security and pension income	0.910	0.961	0.95	4,981	9,197	0.54
(e) Total income	1.000	1.000	1.00	3,853	24,778	0.16
Memo: Median family income				4,035	11,233	0.36

Note: Source: Own computations from the 1983 SCF. Age classification is based on head of household.

TABLE 3

HOUSEHOLD WEALTH BY COMPONENT AND POVERTY STATUS, 1983

Component	Proportion of Families with Component			Mean Value of Component for Holders Only		
	Below Poverty Line	Above Poverty Line	Ratio	Below Poverty Line (in dollars)	Above Poverty Line (in dollars)	Ratio
1. Assets						
(a) Owner-occupied housing	0.383	0.676	0.57	35,929	74,371	0.48
(b) Vehicles	0.519	0.898	0.58	2,956	6,128	0.48
(c) Other consumer durables	1.000	1.000	1.00	6,217	8,587	0.72
(d) Inventories	1.000	1.000	1.00	1,312	3,177	0.41
(e) Demand deposits	0.390	0.852	0.46	1,718	5,210	0.33
(f) Savings deposits, CDs, etc.[a]	0.355	0.806	0.44	3,465	27,208	0.13
(g) Insurance and pension cash surrender value	0.151	0.443	0.34	6,907	13,892	0.50
(h) Unincorporated business equity	0.049	0.157	0.31	108,439	203,891	0.53
(i) Investment real estate	0.063	0.210	0.30	32,539	122,362	0.27
(j) Financial securities, stocks, and trusts	0.062	0.295	0.21	8,442	93,644	0.09
2. Liabilities						
(a) Mortgage debt	0.118	0.414	0.29	16,941	28,869	0.59
(b) Other debt	0.430	0.671	0.64	3,383	15,475	0.22

Addendum: Home-ownership Rates Among the Poor by Age and Location (in percents)

	Under 65	65 and Over	All Ages
1. Urban	19.5	43.7	23.9
2. Surburban	37.0	54.1	40.8
3. Rural	36.2	73.6	48.2
All	30.0	62.6	38.3

Source: Own computations from the 1983 SCF.

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

Moreover, the mean value of homes owned by families above the poverty line is double that of poor homeowners. Over half of poor families owned an automobile, compared to 90 percent of families above the poverty line, and its average value among poor families is half that of other families.

Almost 40 percent of poor families had at least one checking account and 36 percent had a savings account or some other form of liquid asset. In contrast, 85 percent of families above the poverty line had at least one checking account and 81 had some other form of liquid asset. The average value of liquid assets for depositors in the latter group is over seven times that of poor families.

The percentage of poor families owning their own business is a third that of other families, as is the percentage owning investment real estate. The average value of unincorporated business equity among poor families who owned their own business is over half that of business owners above the poverty line. Only 6 percent of poor families owned some form of financial securities or stock. Moreover, the average holdings of these assets is less than 10 percent of families above the poverty line.

On the liability side, 12 percent of poor families, or 31 percent of poor home-owners, held mortgage debt, in contrast to 41 percent of families above the poverty line, or 61 percent of these home-owners. The ratio in the average value of outstanding mortgates between mortgagees below and above the poverty line is almost three-fifths. Forty-three percent of poor families held some form of consumer debt, compared to 67 percent of families above the poverty line. However, the average value of consumer debt for poor families with debt is only a fifth of that of other families.

The average value of gross assets of families below the poverty line is 18 percent of that of families above the poverty line (see Table 4). The ratio of total debt between the two groups is slightly lower, at 0.15, so that the ratio of mean net worth is slightly higher, at 0.19. This ratio is higher than that of mean incomes. The ratio in median net worth is almost identical to that of mean wealth. Data on "fungible wealth," defined as net worth less consumer durables and household inventories, is also shown. This is, perhaps, a better measure of disposable wealth than standard net worth. The ratio in mean fungible wealth between the two groups is 0.14, lower than that of net worth or income. Moreover, median fungible wealth among the poor is almost zero, so that the ratio in median fungible wealth between the two groups is only 0.02.

The wealth of poor families consisted primarily of three components: owner-occupied housing, consumer durables and inventories. The mean value of housing among poor families is 27 percent that of families above the poverty line, and the mean value of durables and inventories among poor families is 52 percent that of the others. Indeed, the ratio of average net equity in owner-occupied housing is slightly higher, at 0.28, because of the relatively lower ratio of mortgage debt to home value among the poor. Together, owner-occupied housing, durables, and inventories amounted to two-thirds of the gross assets of poor families, compared to a little more than a third for families above the poverty line. The only other asset of appreciable magnitude held by the poor is unincorporated business equity, which amounted to 16 percent of gross assets.

TABLE 4

MEAN HOUSEHOLD WEALTH BY COMPONENT, POVERTY STATUS, AND AGE, 1983

Component	All Ages		Ratio: Below/Above Poverty Line			
	Below Poverty Line (in dollars)	Above Poverty Line (in dollars)	All Ages	Under 35	Ages 35-64	65 and Over
Wealth Component						
1. Gross value of owner-occupied housing	13,761	50,275	0.27	0.20	0.31	0.31
2. Durables and inventory	9,063	17,268	0.52	0.58	0.52	0.53
3. Demand deposits, savings deposits, insurance CSV, etc.[a]	2,944	32,523	0.09	0.14	0.11	0.06
4. Unincorporated business equity	5,314	32,011	0.17	0.11	0.25	0.05
5. Investment real estate	2,050	25,696	0.08	0.21	0.10	0.03
6. Financial securities, stocks, and trusts	524	27,625	0.02	0.11	0.01	0.02
7. Total debt	3,454	22,336	0.15	0.17	0.17	0.20
Net home equity[b]	12,021	43,403	0.28	0.26	0.32	0.30
Gross assets	33,655	185,398	0.18	0.27	0.22	0.12
Net worth	30,202	163,062	0.19	0.32	0.22	0.12
Fungible wealth[c]	21,139	145,794	0.14	0.18	0.19	0.09
Memo:						
Median net worth	11,668	57,989	0.20	0.36	0.16	0.19
Median fungible wealth	797	40,073	0.02	0.01	0.05	0.11

Source: Own computations from the 1983 SCF. Age classification is based on head of household.

[a]This category includes all checking and savings accounts, time deposits, certificates of deposit, money market funds, IRA and Keogh accounts, U.S. savings bonds, and cash surrender value (CSV) of insurance and pension plans.

[b]For the computation of net equity in owner-occupied housing, total mortgage debt is allocated proportionately between the gross value of owner-occupied housing and other real estate.

[c]Fungible wealth is defined as net worth less consumer durables and household inventories.

All other assets combined amount to only 16 percent of the gross assets of the poor. Average balances of demand deposits, savings deposits, and other liquid assets among poor families total only 9 percent that of families above the poverty line. The ratio in average holdings of financial securities, stocks, and other assets between the two groups is only 0.02. This compares to a ratio of property income of 0.03.[2]

Wealth by Age Group. Wealth-holding patterns by age group differ considerably between families below and above the poverty line. Among both groups average wealth is lowest for young families. However, among poor families, wealth is higher for middle-aged families than elderly ones, whereas the opposite is the case for families above the poverty line.

As a concequence, the disparity in average wealth holdings between families living below and above the poverty line increases sharply with age. The ratio in average net worth between the two groups falls from 0.32 for young families to 0.22 for middle-aged ones and to 0.12 for the elderly. The pattern for average fungible wealth is slightly different, with the ratio between the two groups the same for young and middle-aged families and substantially lower among the elderly. The medians also tell a different story. The ratio in median net worth between the poor and non-poor is substantially lower for middle-aged families than younger ones, but slightly higher among the elderly. Moreover, the ratio of median fungible wealth increases across the three age groups. The differences can be traced to the fact that mean net worth and mean fungible wealth are actually lower among the elderly poor than among the middle-aged poor, whereas median net worth and fungible wealth are greater for the latter than the former.

The breakdown of wealth by asset type is revealing. Whereas the ratio of wealth between families below and above the poverty line is decidedly lower for the elderly than younger families, this is not true for either the gross or net value of owner-occupied housing. The ratio in unincorporated business equity is considerably higher among middle-aged families than among the young or elderly. However, the relative holdings of liquid assets, investment real estate, and stocks and financial securities between the two groups falls sharply with age, and these assets primarily account for the overall pattern of wealth with age.

IV. Pension and Social Security Wealth, 1983

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

[2]It is interesting 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 is $202,000, almost 25 percent greater than the mean wealth of all the non-poor, and their average fungible wealth is $187,000. For the upper wealth decile of the poor, home equity averages $79,000, or 39 percent of their fungible wealth. Unincorporated business equity averages $73,000, considerably above the mean value of this component for the non-poor, and the mean value of investment real estate is $27,000. Together, unincorporated business equity and investment real estate comprise 49 percent of the fungible wealth of the upper decile, 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 having low income but owning a very high value of business assets.

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 (1987b) for a methodological discussion].

Five percent of the poverty sample reported in 1983 that they were receiving benefits from private (or government) pensions, compared to 12 percent of the non-poor (see Table 5). Since 36 percent of poor families had at least one family member 65 or over, in contrast to 41 percent of other families, this means that 15 percent of elderly poor families received some form of private or government pension, in contrast to 28 percent of the other elderly. Only 7 percent of poor families reported that they expected some form of pension benefits when they

TABLE 5

ESTIMATES OF PENSION AND SOCIAL SECURITY WEALTH BY POVERTY STATUS, 1983

	Current Beneficiaries	Future Recipients	All Beneficiaries
I. Families below the poverty line			
A. Pension Wealth			
1. Proportion of total households with pension wealth[a]	0.053	0.066	0.112
2. Mean value (beneficiaries only)			
(a) $r=0.0$	$27,440	$59,231	$49,261
(b) $r=0.01$	24,350	43,808	37,900
(c) $r=0.02$	21,785	31,772	29,485
(d) $r=0.03$	19,637	23,143	23,302
B. Social security wealth			
1. Proportion of total households with social security wealth[a]	0.189	0.635	0.812
2. Mean value (beneficiaries only)			
(a) $r=0.0$	$73,963	$78,790	$78,203
(b) $r=0.01$	66,908	54,811	65,584
(c) $r=0.02$	60,876	38,804	56,204
(d) $r=0.03$	55,687	28,006	49,067
II. Families above the poverty line			
A. Pension wealth			
1. Proportion of total households with pension wealth[a]	0.115	0.258	0.367
2. Mean value (beneficiaries only)			
(a) $r=0.0$	$137,714	$199,662	$188,578
(b) $r=0.01$	125,182	157,785	149,859
(c) $r=0.02$	114,418	127,401	123,783
(d) $r=0.03$	105,097	101,723	103,727
B. Social security wealth			
1. Proportion of total households with social security wealth[a]	0.144	0.848	0.958
2. Mean value (beneficiaries only)			
(a) $r=0.0$	$94,077	$105,228	$104,542
(b) $r=0.01$	87,304	81,436	87,463
(c) $r=0.02$	81,263	64,153	74,550
(d) $r=0.03$	75,853	51,404	64,593

Source: Own computations from the 1983 SCF. The variable r indicates net discount rate. See the Appendix for details on the calculation of pension and social security wealth.

[a]Note that the last column may not equal the sum of the first two, because some families may have both a current and a future beneficiary.

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 other families.[3] Thus, over three times the relative number of families above the poverty line reported some form of pension wealth.

There is also a very large difference in the mean value of pension wealth between poor and other families. Among current beneficiaries, the mean value of pension wealth at a zero percent net discount rate (r) for poor families is $27,000, in comparison to $138,000 among families above the poverty line. Among future recipients, there is a threefold difference in mean pension wealth. Altogether, average pension wealth among both current and future beneficiaries is about four times greater among non-poor 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 (in 1983). 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 were either currently receiving or expected to receive social security benefits. 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.

The ratio of mean social security wealth among beneficiaries below the poverty line to those above is considerably higher than the corresponding ratio in pension wealth. Among current recipients, the ratio, at a zero percent discount rate, is 0.79, and among future recipients it is 0.75. The ratio among both current and future beneficiaries in the two samples is about three-fourths, and this ratio is almost invariant across discount rates.

In Table 6 I present a comparison of augmented household wealth W^*, where W^* is defined as the sum of marketable wealth W, pension wealth *PENWLTH*, and social security wealth *SSWLTH*. The ratio in mean pension wealth between families below and above the poverty line varies between 0.07 and 0.08, depending on the discount rate. The ratio in average social security

[3]It should be noted that the number of families currently receiving or expecting pension benefits is less than the sum of the number of families currently receiving benefits and the number expecting benefits, since a family may have one spouse currently receiving benefits and another expecting to receive benefits.

TABLE 6

MEAN WEALTH HOLDINGS BY POVERTY STATUS AND AGE, WITH PENSION WEALTH AND SOCIAL SECURITY WEALTH INCLUDED, 1983

Component	All Ages		Ratio: Below/Above Poverty Line		
	Below Poverty Line (in dollars)	Above Poverty Line (in dollars)	All Ages	Under 65	65 and Over
1. Marketable net worth (W)	30,202	163,062	0.19	0.25	0.12
2. Discount rate (r) = 0.00					
(a) PENWLTH	5,517	69,208	0.08	0.09	0.03
(b) SSWLTH	63,501	100,151	0.63	0.66	0.43
(c) W+PENWLTH	35,719	232,270	0.15	0.17	0.10
(d) W* = W+PENWLTH+SSWLTH	99,220	332,421	0.30	0.34	0.17
3. Discount rate (r) = 0.01					
(a) PENWLTH	4,245	54,998	0.08	0.09	0.03
(b) SSWLTH	53,254	83,790	0.64	0.69	0.44
(c) W+PENWLTH	34,447	218,060	0.16	0.18	0.10
(d) W* = W+PENWLTH+SSWLTH	87,701	301,850	0.29	0.34	0.17
4. Discount rate (r) = 0.02					
(a) PENWLTH	3,302	45,428	0.07	0.09	0.03
(b) SSWLTH	45,638	71,419	0.64	0.71	0.44
(c) W+PENWLTH	33,504	208,490	0.16	0.18	0.10
(d) W* = W+PENWLTH+SSWLTH	79,142	279,909	0.28	0.33	0.17
5. Discount rate (r) = 0.03					
(a) PENWLTH	2,610	38,068	0.07	0.08	0.03
(b) SSWLTH	39,842	61,880	0.64	0.75	0.44
(c) W+PENWLTH	32,812	201,130	0.16	0.19	0.10
(d) W* = W+PENWLTH+SSWLTH	72,654	263,010	0.28	0.32	0.16

Source: Own computations from the 1983 SCF. Age classification is based on head of household.

wealth between the two groups varies between 0.63 and 0.64, considerably higher than the ratio of pension or marketable wealth.

The addition of pension wealth to the household portfolio reduces the ratio of mean wealth between the poor and the non-poor population from 0.19 to 0.15-0.16. The addition of social security wealth to the household portfolio has the opposite effect, raising the ratio of average wealth between the two groups to 0.28-0.30. The net effect of adding both pension wealth and social security wealth to the household portfolio is thus equalizing.

The disparity in both pension and social security wealth between poor families and families above the poverty line is considerably less for families under 65 than for the elderly. Among families under 65, the addition of pension and social security wealth to the household portfolio narrows the gap in relative wealth holdings between the two groups from 0.25 to 0.32-0.34. Among the elderly, the gap is narrowed from 0.12 to only 0.16-0.17. Thus, the equalizing effect of retirement wealth is greater among younger households than among elderly ones.

V. Comparative Income and Wealth Holdings, 1962

The official poverty statistics for 1962 from the Current Population Reports indicate a poverty rate of 21.0 percent for individuals. This compares with a poverty rate of 20.3 percent estimated from the 1962 SFCC.[4]

In Table 7 comparative income and wealth statistics for families below and above the poverty line in 1962 is presented. Average income among the poor is 19 percent of that among families above the poverty line. This ratio is somewhat higher than in 1983. The ratio in median family income is 0.17, the same as the 1983 ratio. The ratio in mean income is somewhat lower for families 65 and over than for those under 65. However, as in 1983, the ratio of median income is significantly higher for the elderly, and, as in 1983, this is due to the relatively low median income among elderly families above the poverty line.

Mean net worth for families below the poverty line is 29 percent of that of families above the poverty line. This ratio is considerably higher than that of mean or median income in 1962 and the ratio of mean net worth between the two populations in 1983. The ratio in mean fungible wealth between the two groups is 0.26, slightly lower than that of net worth. However, the ratio in median net worth is 0.20, lower than that of mean wealth, while the ratio of median fungible wealth between the two groups is only 0.03.

The wealth of poor families was more diversified in 1962 than in 1983. Owner-occupied housing, consumer durables, and inventories comprised 45 percent of their gross assets in 1962, compared to 68 percent in 1983. Fifteen percent of their assets in 1962 were in the form of liquid assets, 20 percent in unincorporated business equity, and 17 percent in the form of financial securities and stocks. The mean value of housing among poor families was 29 percent that of non-poor families, and the ratio of average net equity in owner-occupied housing was 0.33, because of the relatively low ratio of mortgage debt to home value among the

[4]Data on poverty thresholds for 1962 were obtained from the *Social Security Bulletin*, 1981, p. 59.

TABLE 7

HOUSEHOLD INCOME AND WEALTH BY POVERTY STATUS AND AGE, 1962

Component	All Ages		Ratio: Below/Above Poverty Line			
	Below Poverty Line (in dollars)	Above Poverty Line (in dollars)	All Ages	Under 35	35–64	65 and Over
A. Income						
1. Mean household income	1,469	7,764	0.19	0.27	0.19	0.18
2. Median household income	1,135	6,827	0.17	0.25	0.18	0.35
B. Mean Wealth by Component						
1. Gross equity in owner-occupied housing	2,818	9,702	0.29	0.30	0.22	0.39
2. Durables and inventory	2,506	5,015	0.50	0.55	0.51	0.56
3. Demand deposits, savings deposits, insurance CSV, etc.[a]	1,752	7,426	0.24	0.08	0.18	0.22
4. Unincorporated business equity	2,353	5,543	0.42	0.40	0.58	0.14
5. Investment real estate	425	2,415	0.18	0.00	0.11	0.20
6. Financial securities, stocks, and trusts	1,958	12,434	0.16	0.06	0.16	0.10
7. Total debt	983	5,392	0.18	0.20	0.20	0.27
Net home equity[b]	2,312	6,928	0.33	0.60	0.24	0.38
C. Total household wealth						
Mean gross assets	11,812	42,534	0.28	0.28	0.28	0.20
Mean net worth	10,829	37,142	0.29	0.31	0.29	0.20
Mean fungible wealth[c]	8,323	32,127	0.26	0.17	0.26	0.18
Median net worth	2,878	14,295	0.20	0.42	0.23	0.29
Median fungible wealth[c]	867	33,857	0.03	0.07	0.08	0.24

Source: Own computations from the 1962 SFCC. Age classification is based on head of household.

[a]This category includes all checking and savings accounts, time deposits, certificates of deposit, U.S. savings bonds, and the cash surrender value (CSV) of insurance and pension plans.

[b]For the computation of net equity in owner-occupied housing, total mortgage debt is allocated proportionately between the gross value of owner-occupied housing and other real estate.

[c]Fungible wealth is defined as net worth less consumer durables and household inventories.

poor. The ratio in unincorporated business equity between the two groups was surprisingly high, at 0.42.

The ratio in average net worth between families above and below the poverty line falls from 0.31 for young families to 0.29 for middle-aged ones and to 0.20 for the elderly. The pattern for average fungible wealth is different, with the ratio between the two groups highest for middle-aged families and about the same for young and elderly ones. The medians also show a different pattern. The ratio in median net worth between the poor and non-poor is substantially lower for middle-aged families than younger ones, but higher among the elderly than the middle-aged. However, the ratio of median fungible wealth increases across the three age groups.

The differences in accumulation patterns become apparent when individual asset types are analyzed. The relatively high ratio of both mean and median net worth between poor and non-poor families under 35 is due to the high proportion of durables and inventories in the portfolio of young families (38 percent). Moreover, the ratio of median fungible wealth between the two groups increases across age groups, primarily because of the higher home-ownership rate among the older poor than the younger poor and its higher net equity value. Indeed, average net equity in owner-occupied housing among the elderly poor is 3.6 times the value among poor families under 35 and 1.8 times the value among the middle-aged poor.[5]

VI. Alternative Poverty Rate Calculations, 1962 and 1983

In the last part of the analysis I consider the effect of alternative definitions of the poverty threshold on estimates of the poverty rate. The official poverty rate measure is based exclusively on household income. Yet, poverty as a concept should ideally reflect deprivation in the total economic resources required for a minimal level of well-being. In this section, I propose alternative measures of poverty based on both the income and wealth at a family's disposal. This joint criterion gives a better gauge of available resources than one based exclusively on income.

Two techniques are used to compute alternative poverty rates. The first is to convert wealth holdings into an annuity, or income flow, at a given interest rate. For this purpose, it makes sense to use only fungible net worth (FUNGWLTH), since other components of wealth directly serve consumption needs. Moreover, it is assumed that the annuity is paid out like a bond coupon, so that the capital value of fungible wealth remains unchanged. Three alternative interest rates are used in the calculation: (i) 0.03, (ii) 0.05, and (iii) 0.07.

Line 1 of Panels IIA, IIB, and IIC of Table 8 shows what the poverty rate would be if an annuity computed to fungible wealth were added to Census family income (and the official poverty threshold remained unaltered). This procedure overstates the reduction in the poverty rate from imputing an annuity to fungible wealth, since these assets already produce income in the form of rent, interest,

[5]The high ratio in net home equity between families below and above the poverty line under 35 is due to the low home equity among the latter.

TABLE 8

ALTERNATIVE POVERTY RATE CALCULATIONS BASED ON FAMILY INCOME AND WEALTH, 1983 AND 1962

	1983			1962
	Under 65	65 and Over	All	All
I. Family income (FAMINC)	1.00	1.00	1.00	1.00
II. Family income plus annuitized wealth				
A. Interest rate of 0.03				
1. FAMINC + gross annuity from FUNGWLTH	0.967	0.840	0.941	0.872
2. FAMINC + net annuity from FUNGWLTH	0.975	0.885	0.957	0.909
3. FAMINC + gross imputed rent	0.945	0.908	0.937	0.941
4. FAMINC + net imputed rate	0.993	0.961	0.986	—
5. FAMINC + gross annuity + gross rent	0.928	0.809	0.904	0.814
6. FAMINC + net annuity + net rent	0.969	0.885	0.952	—
B. Interest rate of 0.05				
1. FAMINC + gross annuity from FUNGWLTH	0.941	0.824	0.916	0.805
2. FAMINC + net annuity from FUNGWLTH	0.940	0.822	0.917	0.827
3. FAMINC + gross imputed rent	0.917	0.798	0.890	0.909
4. FAMINC + net imputed rate	0.970	0.943	0.964	—
5. FAMINC + gross annuity + gross rent	0.902	0.592	0.838	0.736
6. FAMINC + net annuity + net rent	0.935	0.779	0.903	—
C. Interest rate of 0.07				
1. FAMINC + gross annuity from FUNGWLTH	0.919	0.738	0.882	0.768
2. FAMINC + net annuity from FUNGWLTH	0.919	0.747	0.884	0.786
3. FAMINC + gross imputed rent	0.892	0.745	0.859	0.872
4. FAMINC + net imputed rate	0.951	0.886	0.936	—
5. FAMINC + gross annuity + gross rent	0.886	0.561	0.819	0.691
6. FAMINC + net annuity + net rent	0.915	0.674	0.865	—
III. Joint income and wealth criterion				
1. FAMINC $< Y_p$ and $W < W_{.5}$	0.871	0.768	0.850	
2. FAMINC $< Y_p$ and $W < W_{.25}$	0.662	0.504	0.629	
3. FAMINC $< Y_p$ and $W < W_{.2}$	0.604	0.473	0.577	
4. FAMINC $< Y_p$ OR $W < W_p$	1.213	1.169	1.197	

Source: Own computations from the 1983 SCF. Age classification is based on head of household. The new poverty rate is shown as a fraction of the official poverty rate. Key:

FUNGWLTH = net worth less consumer durables and household inventories.
Y_p = (official) income poverty line.
$W_{.5}$ = median net worth.
$W_{.25}$ = first quartile net worth.
$W_{.2}$ = first quintile net worth.
W_p = wealth "poverty line."

dividends, and unincorporated business profits. In line 2, property income is subtracted from the "gross" annuity value. Another source of income not captured by money income is imputed rent to owner-occupied housing. The rationale is that owners of homes often pay less than tenants for comparable housing because of the equity built up and the capital gains from owning one's own home, and this difference should be included as part of the homeowner's income. Gross imputed rent is estimated as annuity flow from the gross value of owner-occupied housing (see line 3). Net imputed rent is defined as gross imputed rent less actual payments for mortgate interest, homeowner insurance, and property taxes (line

4).[6] In line 5, the poverty rate calculation is based on the sum of family income, the gross annuity to fungible wealth, and gross imputed rent, while in line 6 the corresponding net values are used.

The calculations are quite revealing. At a three percent interest rate, overall poverty rates for 1983 are relatively unaffected by expanding the definition of income. The average annuity from fungible wealth amounts to 10 percent of the average family income of the poor in 1983, and the poverty rate based on the sum of family income and the gross annuity is 0.94 of the rate based on family income alone (line A.1). Average (gross) imputed rent to owner-occupied housing equals 7 percent of average family income in 1983, and the adjusted poverty based on the sum of family income and gross imputed rent is 0.94 of the income-based rate (line A.3). Expanding income to include both gross annuity and gross imputed rent results in a 10 percent reduction (line A.5). However, the reduction in measured poverty rates is considerably greater for elderly families because of their high home-ownership rate and a relatively high number with sizable fungible wealth. Expanding income to include both gross annuity and gross imputed rent results in a 19 percent reduction in their measured poverty rate (line A.5).

At a five percent interest rate, the average annuity from fungible wealth amounts to 16 percent of average family income among the poor in 1983, and average gross imputed rent to 11 percent. Including both gross annuities and gross imputed rent causes a 16 percent reduction in measured poverty, while including their corresponding net values results in a 10 percent reduction. Among the elderly population, the reduction in measured poverty is even more substantial, at 41 percent and 22 percent, respectively. At a seven percent interest rate, the gross annuity from fungible wealth equals 23 percent and gross imputed rent 16 percent of family income among the poor. The reduction in the measured poverty rate from including gross annuities and gross imputed rent is 18 percent, and the reduction from including their net counterparts is 13 percent. For the elderly, the corresponding reductions are 44 percent and 33 percent.[7]

The second technique used to compute an alternative poverty rate is based on a joint threshold of family income and family net worth. Such an approach is suggested in Radner and Vaughan (1987). I have chosen three thresholds for family wealth—(i) the median of the overall distribution of wealth: (ii) the first quartile; and (iii) the first quintile. In the first set of computations, I define poverty to be an inadequacy in *both* income and wealth. Alternative poverty rates calculated on the basis of the joint threshold are considerably lower than those based on Census family income alone. A joint criterion based on income and median family wealth results in a 15 percent reduction in the measured poverty

[6]These data are not available for 1962.

[7]On the opposite side of the spectrum arises the issue of the relative number of poor people 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 have an annuity-income ratio that exceeds 0.20 and only 6 percent have a ratio that exceeds 0.50. At a 5 percent annuity rate, 20 percent of poor families have an annuity-income ratio greater than 0.20 and 10 percent have a ratio greater than 0.50. At a 7 percent annuity rate, the respective percentages are 25 and 14. Thus, it appears that only a relatively small percentage of the poor have a significant amount of fungible wealth.

rate; one based on first quartile family wealth a 37 percent reduction; and one based on the first quintile a 42 percent decline. As a comparison, Radner and Vaughan find on the basis of the 1979 Income Survey Development Program (ISDP) file that 41 percent of the bottom quintile in the income distribution are also in the bottom quintile of the wealth distribution.

The last calculation is based on the "wealth poverty line," defined as the product of the official poverty line (based on income) and the ratio of median household wealth to median household income. In some sense, the wealth poverty line represents the amount of wealth necessary to sustain a minimally adequate standard of living. Such assets can be viewed as providing needed consumption services and sustaining normal consumption expenditures during periods of income loss. Poverty status is then defined by an insufficiency in *either* income or wealth. Such a double threshold would imply that a family is destitute if it has either inadequate income to meet normal minimal needs or inadequate wealth to provide minimal consumption services or to meet minimal interruptions of normal income flow. This definition yields an overall poverty rate 20 percent greater than the official rate. The rate is somewhat lower for elderly families, because of their greater relative wealth.

Results for the 1962 data are even more telling. At a three percent interest rate, expanding income to include gross annuity flows results in a 13 percent reduction in the measured poverty rate (line A.1), while including net annuity flows causes a 9 percent decline (line A.2). Adding both gross annuity flows and gross imputed rent reduces the measured poverty rate by 19 percent (line A.4). The reduction in the poverty rate from including gross annuity flows and gross imputed rent is 26 percent at a five percent interest rate and 31 percent at a seven percent interest rate.

VII. Summary and Conclusion

Several interesting findings emerge from this study. First, families below the poverty line are better off in terms of wealth than in terms of income relative to families above the poverty line. This is particularly true for 1962, for which the ratio of mean income between families below and above the poverty line is 0.19 and the ratio of mean net worth is 0.29. The corresponding ratios for 1983 are 0.16 and 0.19. Results on median income and net worth indicate the same pattern. However, median fungible wealth among the poor is extremely low in both years, and, in 1983, 46 percent of poor families had zero or negative fungible net worth, compared to 16 percent of the non-poor.

Second, the ratio of mean family income between families below and above the poverty line is almost the same among the elderly population as among those under 65 in 1962 and 1983, but the ratio in median family income is considerably higher among the elderly, a result due to the low median income among non-poor elderly families. In contrast, the ratio in average net worth between the two groups is considerably lower among the elderly in the two years. However, the ratio in median net worth between the poor and non-poor is greater among the elderly than younger families, and the ratio in median fungible wealth considerably higher. The difference in results is due to the presence of a relatively large minority of elderly families above the poverty line who are very wealthy. On

average, the elderly poor are better off in terms of both net worth and fungible wealth than the younger poor. Indeed, relative to their own income, they are considerably better off. The ratio of mean net worth to mean income for 1962 is 5.8 among poor families under 65 and 12.1 for the elderly poor; the 1983 ratios are 5.8 and 7.9, respectively. The ratio of median net worth to median income for 1962 is 2.0 for the poor under 65 and 7.1 for the elderly poor, and the corresponding 1983 ratios are 2.2 and 4.1.

Third, the results indicate that the poor have become worse off in terms of wealth between 1962 and 1983. Whereas the real income of the poverty population grew by 6 percent, their net worth in real terms declined by 11 percent. Moreover, in 1983, owner-occupied housing, durables, and inventories amounted to two-thirds of the gross assets of poor families, compared to a little more than a third for families above the poverty line. In 1962, the wealth of the poor was more diversified. These three assets comprised only 45 percent of their gross assets. Fifteen percent of their assets in 1962 were in the form of liquid assets, 20 percent in unincorporated business equity, and 17 percent in the form of financial securities and stocks.

Fourth, on the basis of the 1983 data, the addition of pension wealth to the household portfolio reduces the ratio of mean wealth between the poor and the non-poor population from 0.19 to 0.15–0.16. The addition of social security wealth to the household portfolio has the opposite effect, raising the ratio of average wealth between the two groups to 0.28 to 0.30. The net effect of adding both pension wealth and social security wealth to the household portfolio is thus equalizing. However, the equalizing effect of retirement wealth is considerably less among elderly households than among younger ones.

Fifth, alternative poverty rate calculations are quite revealing. When annuity flows from fungible wealth and the imputed rent on owner-occupied housing are included in household income, the measured poverty rate, based on the official poverty thresholds, is reduced by about 10 percent for the full population and over 20 percent for elderly families in 1983. The reduction in the measured poverty rate on the basis of the 1962 data is about 10 percentage points greater, because of the greater wealth holdings of the poor in the earlier year. Indeed, the reduction in the poverty rate between 1962 and 1983, from 21 to 15 percent on the basis of the official rate, is considerably lower on the basis of these alternative definitions. Moreover, when poverty status is defined as deprivation in either income or wealth holdings, measured poverty rates are about 20 percent higher than the official rates in 1983.

The final point of interest is the implications of these findings for the persistence of poverty among the poor. On the basis of the 1983 data, only 10 to 15 percent of poor families have significant wealth holdings. Of these, approximately 4–5 percentage points own large holdings in real estate or unincorporated business equity, and their "poverty income" is based on large income losses associated with these properties. The remaining families in this group are likely to be recent entrants into the poverty population, due to a sudden loss of income. However, the vast majority of families below the income poverty line have low levels of wealth and are likely to have been below the poverty line or at low income levels for a considerable period of time, as previous studies have indicated.

Appendix: Definitions of Income and Wealth and Data Sources

A. *Family Income, 1982*

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

1. Wages and salaries.
2. Net income from unincorporated businesses, farms, partnerships, and 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' and unemployment compensation.
8. Child support, alimony, inheritance, gifts, and financial support from friends and relatives.
9. ADC, AFDC, food stamps, SSI, and other public assistance.
10. Retirement, annuity, pension, and disability income, and survivors' benefits.
11. Other income.

Census income is equal to SCF 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 separately identified. 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, 1984, p. 181.

B. *Household Balance Sheets, 1983*

All wealth components were available in the 1983 SCF, except non-vehicle consumer durables and household inventories, for which special imputations were made [see Wolff (1987a)]. The wealth components are as follows:

1. Owner-occupied housing.
2. Other real estate. In the case of multiple-family dwellings, 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 units.
3. Vehicles.
4. Other consumer durables. The value of non-vehicle durables was imputed to each household on the basis of family income, the age of the head of household, marital status, and place of residence.
5. Household inventories. Their value was imputed to each household on the basis of data from the 1972 Consumer Expenditure Survey.
6. Demand deposits and currency.
7. Time and savings deposits, money market funds, IRA and KEOGH account balances, certificates of deposit, and U.S. savings bonds.
8. Financial securities, including government (except U.S. savings), corporate, foreign and other bonds; and mortgage assets held by the family.

9. Stock shares, including publicly traded stocks, investment clubs, mutual funds, and call money accounts at stock brokerage firms.
10. 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.
11. Trusts, defined as the family's interest in trust funds.
12. The cash surrender value of insurance.
13. The cash surrender value of pension plans.
14. Mortgage debt, on owner-occupied housing and other real estate.
15. Other debt, including total loans outstanding on vehicles, installment loans outstanding on other durables, money owed on other investments, and other loans.

C. *Estimates of Retirement Wealth, 1983*

The valuation of pension wealth and social security wealth is based on expected income flows. Pension wealth (PENWLTH) is defined as the present value of discounted future pension benefits. In similar fashion, social security wealth (SSWLTH) is defined as the present value of the discounted stream of future social security benefits. Future entitlements from both pensions and the social security program depend on many factors, such as the health (and survival) of a company, productivity growth and other macroeconomic factors, and future legislation. Estimating the value of such forms of wealth depends on relatively crude assumptions about the future state of the economy.

The imputation of both pension and social security wealth involves a large number of steps, which I will summarize here [technical details can be found in Wolff (1988)]. For retirees (r) the procedure is straightforward. Let PB be the pension benefit currently being received by the retiree. If it is assumed that pension benefits remain fixed in nominal terms over time for a particular beneficiary, then

$$\text{PENWLTH}_r = \int_0^{LE} PB\, e^{-it}\, dt \tag{1}$$

where LE is the conditional life expectancy and i the discount rate, for which the 10-year treasury bill rate is used. For current social security beneficiaries,

$$\text{SSWLTH}_r = \int_0^{LE} SSB\, e^{(g'-i)t}\, dt \tag{2}$$

where SSB is the currently received social security benefit and g' the expected rate of growth of mean social security benefits over time for retirees.

Among current workers (w) the procedure is more complex. In regard to pension wealth, both pension coverage and expected pension benefits, EPB, (based on responedent information) are already provided in the SCF data. Then pension wealth for current workers is given by,

$$\text{PENWLTH}_w = \int_0^{LD} EPB\, e^{g''t}\, e^{-i(t+A_r)}\, dt \tag{3}$$

where g'' is the expected rate of growth of average pension benefits, A is current age, $A_r = 65 - A$ is the years to retirement, and $LD = LE - 65$.

Social security coverage among current workers is also provided in the SCF. Accumulated earnings (AE) from the start of working life to the present are estimated for each covered worker. These are based on human capital earnings functions, which are imputed separately by sex, race, and schooling level. Past earnings are accumulated on the basis of real growth in average earnings and the discount rate is the average yield on high-grade corporate bonds.

Covered workers in a given age cohort are then assigned a percentile ranking n based on the distribution of AE for their cohort. The expected social security benefit at retirement (at age 65), *ESSB*, is given by

$$ESSB_n = SSB_n \, e^{g(65-A)} \tag{4}$$

where SSB_n is the nth percentile of social security benefits among beneficiaries of age 65 and g is the expected rate of growth in mean social security benefits for new retirees. Then, social security wealth for current workers in the nth percentile is given by:

$$SSWLTH_{w,n} = \int_0^{LD} ESSB_n \, e^{gt} \, e^{-i(t+A_r)} \, dt. \tag{5}$$

D. *Household Balance Sheets for 1962*

All wealth components were available in the 1962 SFCC, except non-vehicle consumer durables and household inventories, for which special imputations were made [see Wolff (1987a)]. The wealth components are as follows:

1. Owner-occupied housing.
2. Real estate, except owner-occupied housing.
3. Vehicles.
4. Other consumer durables. The value of non-vehicle durables was imputed to each household on the basis of family income, the age of the head of household, marital status, and place of residence.
5. Household inventories. Their value was imputed to each household on the basis of data from the 1962 Consumer Expenditure Survey.
6. Demand deposits and currency.
7. Time and savings deposits, certificates of deposits, and U.S. government savings bonds.
8. Bonds (except U.S. savings bonds) and other financial securities.
9. Corporate stock.
10. Net equity in unincorporated businesses.
11. Trusts and estates.
12. Insurance cash surrender value.
13. Pension cash surrender value.
14. Mortgage debt.
15. Other debt.

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