Volume Title: The Measurement of Saving, Investment, and Wealth

Volume Author/Editor: Robert E. Lipsey and Helen Stone Tice, editors

Volume Publisher: University of Chicago Press

Volume ISBN: 0-226-48468-8

Volume URL: http://www.nber.org/books/lips89-1

Conference Date: March 27-28, 1987

Publication Date: 1989

Chapter Title: The Wealth of the Aged and Nonaged, 1984

Chapter Author: Daniel Radner

Chapter URL: http://www.nber.org/chapters/c8128

Chapter pages in book: (p. 645 - 688)

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Daniel B. Radner

12.1 Introduction

This paper discusses and illustrates the use of wealth data for the analysis of the economic status of households. Selected estimates of wealth for 1984 from the Survey of Income and Program Participation (SIPP) are used as illustrations. The particular focus is on the wealth of age groups, with a special interest in the aged. Comparisons of the amounts and composition of wealth of the aged and nonaged (and of more detailed age groups) are presented. The emphasis is on the economic resources available to households other than the very wealthy. The degree of concentration of wealth, the subject that wealth data traditionally have been used to examine, is not discussed. Thus, this paper reflects a somewhat different perspective on the use of wealth data.

The estimates from SIPP presented here are not intended to provide a complete description of the wealth of age groups. Rather, they are illustrations of several types of useful wealth estimates that can be made from household survey data. For example, one interesting question that can be examined with these data is how many of the aged have both low income and low wealth and therefore would be unable to pay for high medical expenses or to adjust to income loss.

This paper focuses on the amounts of resources available to units of different ages at a particular time. There is no direct concern with

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The author is greatly indebted to Sharon Johnson, who prepared the estimates, and to Benjamin Bridges and Selig Lesnoy for their helpful comments. Any opinions expressed are those of the author and do not necessarily represent the position of the Social Security Administration.

life-cycle issues of saving and accumulation. However, past saving behavior clearly affects the amount of resources available at a specific time, and the interpretation of the economic status of the aged from the estimates shown here is affected by life-cycle considerations. Within an age group and at a particular income level, a unit with more wealth would ordinarily be considered to be better off than a unit with less wealth (assuming that "needs" are the same). Because of life-cycle factors, it is not obvious that the aged are better off than the nonaged if they have more wealth than the nonaged. For example, aged households have had much more time than younger households to accumulate wealth.

A complete assessment of the economic status of the aged (and other age groups) requires data about both their wealth and their income. Economic status is usually assessed using data on income, with an occasional examination of wealth. It is relatively rare that both income and wealth are considered. Although the focus in this paper is on wealth, the use of income and wealth data together is discussed.

Detailed age groups are examined because the broad aged and nonaged groups often used are not homogeneous. For example, it is useful to distinguish between younger aged households (in this paper, head aged sixty-five to seventy-four) and older aged households (head aged seventy-five or older). Those two groups differ substantially in many characteristics, such as labor force participation, marital status, and average income. Nonaged households also differ greatly by age. For example, households with head aged twenty-five to thirty-four have very different characteristics from households with head aged forty-five to fifty-four, particularly with respect to average income.

Amounts of wealth, the distribution of wealth, the composition of wealth, and the joint distribution of wealth and income in 1984 are examined for age groups. Although data needs for analyzing changes in wealth over time are mentioned, estimates of change in wealth are not presented.

12.1.1 Types of Wealth Estimates

Three basic types of wealth estimates have been made by researchers.[1] First, estimates have been made from data on wealth collected in household surveys. These surveys typically collect a wide range of information that can be used in conjunction with the wealth data. The collection of information on wealth is the focus of some surveys (e.g., the 1962 Survey of Financial Characteristics of Consumers [SFCC]). But, in other surveys (e.g., SIPP), wealth is a relatively minor part of the survey. In most cases, data are obtained for households or family units. Ordinarily, the entire wealth distribution is covered. Wealth data from surveys are often considered to be of doubtful accuracy, and

estimates of the upper tail of the wealth distribution usually are particularly poor. Sometimes, a specific effort is made to obtain good data for the upper tail (e.g., by means of a high-income sampling frame). The 1983 Survey of Consumer Finances (SCF) used a high-income frame based on income tax return information to improve estimates of high-wealth units (Avery and Elliehausen 1986). Nonresponse and response error, however, are still serious problems in all parts of the distribution in household surveys.

Second, estimates have been made using information from estate tax returns. Multipliers derived from mortality rates are applied to the information for decedents in those returns to produce estimates of the wealth of the living (e.g., Smith 1974; Schwartz 1983). Only limited socioeconomic information is available in this type of data, and the data are for persons. Estate tax data generally are limited to the upper tail of the wealth distribution because the estate tax (currently) does not apply below a relatively high exempt amount. The wealth data in specific estate tax returns are considered to be relatively accurate. The precision of estimates from estate tax returns has been questioned, however, because of uncertainty about the accuracy of the multipliers used.

Finally, "synthetic" estimates have been made. In this type, estimates of wealth are produced, at least in part, from nonwealth data (e.g., Wolff 1983; Greenwood 1983). Asset income flows have been capitalized into amounts of wealth. Regression analysis has been used to impute amounts of assets for which income flows do not exist. Different data sources have been matched together (sometimes using statistical matching) to construct microdata files from which synthetic estimates can be made. Generally, a wide range of socioeconomic information is available, and the entire wealth distribution is covered. Estimates for households or family units can be made. The accuracy of this type of estimate has been questioned because of the many assumptions required. For example, the proper capitalization rates and regression models are not known and must be approximated. Where statistical matching is used, there is uncertainty about the accuracy of estimated joint distributions.

As noted, the accuracy of each of these types of wealth estimate has been questioned. Because household survey data generally are weakest in the upper tail and estate tax data focus on the upper tail, some analysts have suggested combining data from the two sources to produce improved estimates (e.g., Radner 1975). Synthetic estimates also have a role. In addition to their usefulness as independent estimates, synthetic estimates are also useful for facilitating consistency checks. For example, are survey estimates of financial assets consistent with reasonable capitalization rates for asset income?

12.1.2 Desired Characteristics of the Data

The particular focus of this paper has implications for the characteristics of the wealth data that are needed. There is no direct interest in the upper tail of the wealth distribution. How rich the rich are is not of interest here. The emphasis is on the middle and lower portions of the wealth distribution. The lack of interest in the upper tail makes the concerns here different from the usual concerns about the data. Thus, a household survey that did not do a good job of capturing the upper tail of the wealth distribution could be of use for the type of analysis discussed in this paper.

Several requirements for the characteristics of the wealth data are discussed below. First, the wealth data must be sufficiently accurate. Although wealth data obtained in household surveys often have been criticized as inaccurate, the problems with accuracy probably are worst in the upper tail of the distribution. The data for the remainder of the distribution also have serious problems; item nonresponse rates can be substantial, and answers given can be inaccurate.[2] The types of estimates presented here are less sensitive to errors in the data than the measurement of inequality or the change in inequality because the upper tail is not important here.[3]

A second requirement is that the wealth data should be reasonably current. For example, the 1962 SFCC is too old to be used for analysis of the current situation. Of course, older data can be useful to examine changes over time.

Third, a data source that covers the entire wealth distribution (or the entire distribution except for the upper tail) is needed. Thus, data sources such as estate tax returns that are confined to the upper tail are not appropriate.

Fourth, wealth data are needed for all age groups of the population. This follows from the fact that both the aged and the nonaged are examined and compared. This requirement means that data sources that are confined to particular age groups (e.g., the Social Security Administration's Retirement History Study [Irelan 1972]) are not appropriate.

Fifth, it is necessary that several types of information other than wealth be available for the unit. Information on income is crucial, and information on socioeconomic characteristics (e.g., unit size, sex, marital status, and age of the unit head) is very important. Data from estate tax returns are inappropriate for this reason also.

Sixth, the wealth data should be available for units other than persons. Families and unrelated individuals (often called family units) or households are the most useful units. Data from estate tax returns do not meet this criterion.

Seventh, the data need to be comprehensive enough so that a reasonable definition of net worth can be formed. Although information on limited sets of assets can be useful, it is not sufficient. Also, asset-type detail is needed so that alternative definitions of wealth can be examined. For example, for some purposes, net worth excluding home equity or only liquid assets might be examined. Some household surveys do not meet this criterion.

Eighth, the data source should contain a sufficient number of observations so that age groups and other classifications can be examined. Of particular importance here is enough observations to separate the aged into subgroups. In some household surveys, sample sizes are too small to meet this criterion.

Several household surveys, including SIPP, meet the first seven criteria. The eighth criterion, sample size, is met best by SIPP among the household surveys. Some synthetic estimates meet all the criteria except one: existing synthetic estimates are relatively old.

Two other characteristics are also important, although they are not directly relevant for this paper. The first concerns social security wealth and pension wealth. Although these types of assets are not examined in this paper, they are important for some kinds of analyses. Thus, it is useful for the data source to have information from which those asset types can be estimated. Second, a longitudinal component to the data would be of great use in the examination of changes in wealth over time, although data on change in wealth are often considered to be of limited accuracy. Also, a consistent time series would be very valuable.

12.1.3 Appropriate Types of Estimates and Comparisons

Because the upper tail is not of interest, the focus of this paper also has implications for the types of estimates and comparisons that are of the most use. First, mean amounts of groups of units that include the upper tail should be used as little as possible. Such estimates can be affected substantially by the upper tail. In general, medians are much more appropriate than means. Second, estimating the overall inequality of wealth is not of interest. Such estimates are very sensitive to the estimates for the upper tail. Third, if the accuracy of data sources on wealth is assessed by comparing wealth aggregates from the data source to control aggregates, as is often the case, then the upper tail of the distribution should be removed from both sides of the comparison, if possible. Because aggregate amounts of some asset types are highly concentrated in the upper tail (e.g., corporate stock), a substantial adjustment to the control aggregate is necessary if the upper tail is excluded. Of course, comparisons of aggregates are only crude tests of the accuracy of the estimates. Even if the aggregate were correct, the estimated distribution could be very inaccurate.

12.1.4 Plan of the Paper

Section 12.2 describes several existing sources of data on wealth and compares selected estimates of the age-wealth cross-sectional relation. Estimates of the wealth of age groups in 1984 are presented in section 12.3. The sensitivity of the age-wealth relation to the wealth concept used, median net worth by age and net worth quintile, and the size and composition of the wealth held by the middle 60 percent of the wealth distribution in each age group are examined. Section 12.4 presents estimates of the relation between wealth and income for age groups in 1984. Median amounts of wealth by size of income, the wealth of aged households by size of income, the ratio of wealth to income, and the percentage in each age group with relatively low income and low wealth are discussed. A summary and conclusions are presented in section 12.5.

12.2 Comparison of Selected Estimates

It is useful to compare different estimates of the age-wealth relation to see how similar they are and to see how the estimates from the 1984 SIPP compare to other estimates. Seven data sources are described briefly; then published estimates of the age-wealth relation from those data sources are compared. The comparisons presented here are intended to give only a general idea of the consistency among the different estimates.

12.2.1 Selected Data Sources

The 1984 SIPP collected information on wealth, income, and socioeconomic characteristics in interviews conducted in September through December of 1984 (U.S. Bureau of the Census 1986b).[4] The reference point for asset and liability amounts was the last day of the month that preceded the interview. The estimates are for households; persons in group quarters are not included. The estimates are based on information for about 19,000 households. As noted earlier, the collection of wealth data was not the principal purpose of SIPP. A probability sample that represented the U.S. household population was used; there was no oversampling of high-income or high-wealth units. Net worth, as defined in the estimates shown here, includes home equity, vehicle equity, business equity, financial assets, real estate, and individual retirement accounts (IRAs) and Keogh accounts, minus debts. The value of household durables, equities in pension plans, and the cash value of life insurance are not included in the estimates.

The 1983 SCF obtained information on wealth, income, and socioeconomic characteristics (Avery et al. 1984a, 1984b; Avery and Ellie-

hausen 1986). The survey contained two portions, a multistage probability sample and a high-income frame. Estimates are shown here for the probability sample alone and for the probability sample plus the high-income frame. The estimates shown here for the probability sample are based on information for about 3,700 family units, while the estimates that include the high-income frame are based on about 4,100 family units. The high-income supplement was obtained by drawing about 5,000 family units from tax information. Interviews were completed with 438 of those family units (9 percent). Net worth, as defined in the estimates including the high-income supplement, includes home equity, real estate, business equity, financial assets, and retirement assets (which includes IRAs, Keogh accounts, the cash value of life insurance, and employer-sponsored thrift, profit-sharing, and tax-deferred savings plans), minus debts. The net worth concept used for the estimates that do not include the high-income frame excludes the cash value of life insurance and at least some business equity. Both definitions exclude automobile equity, the value of household durables, and pension and social security wealth.

The 1979 Income Survey Development Program (ISDP) file contains information on wealth, income, and socioeconomic characteristics for almost 7,000 households (Radner and Vaughan 1984; Pearl and Frankel 1984). The sample was nationally representative, and both low-income and high-income households were oversampled, but only slightly. The estimates shown here are primarily from wave 5 of that multiwave survey. Net worth, as shown in these estimates, includes home equity, vehicle equity, market value of household durables, business equity, financial assets, and real estate, minus unsecured debt. Social security and private pension wealth, trusts, and the equity value of life insurance are not included in the estimates shown here.

The 1962 SFCC is regarded by some as the best wealth survey ever undertaken in the United States. This survey contains wealth, income, and socioeconomic information on more than 2,500 family units (Projector and Weiss 1966). Oversampling was used to provide a better estimate of the upper tail of the wealth distribution. Wealth, as defined in the estimates shown here, includes home equity, automobile equity, business equity, liquid assets, and real estate and other investment assets. Unsecured debt was not subtracted; therefore, the concept used was wealth, not net worth. The cash surrender value of life insurance policies and equities in annuities and retirement plans were not included in the estimates shown here.

The President's Commission on Pension Policy's household survey collected information on assets and liabilities, income, employment, various demographic characteristics, pensions, and attitudes about retirement in September 1979 (Cartwright and Friedland 1985). Personal

interviews were completed with about 3,600 households. The sample was a multistage area probability sample; there was no oversampling of the upper part of the distribution. Estimates were presented for units that differ from those presented for other surveys; the units are similar to Census families and unrelated individuals except that family members age eighteen or older in general are considered to be separate units. Estimates are presented for about 4,300 of these "family units." In these estimates, net wealth includes home equity, personal property, vehicle equity, business equity, liquid and investment assets, miscellaneous assets, and the imputed present value of employer-based pensions, IRAs, Keogh plans, and annuities.

The Greenwood synthetic estimates were made using data from income tax returns, estate tax returns, and a household survey (Greenwood 1983). The basic microdata file used was constructed by statistically matching survey information from the Current Population Survey and income tax returns from the 1973 Individual Income Tax Model. Corporate stock, debt instruments, and real estate held were estimated primarily by capitalizing amounts from income tax return data. Then net wealth was estimated by regression analysis for a sample of 1972 estate tax returns, using the capitalized corporate stock, debt instrument, and real estate amounts. The regression parameters were used to assign an amount of net wealth to each family unit in the basic file. Net wealth, as used in these estimates, is based on a more comprehensive definition than is used in most surveys. In addition to the usual assets, personal possessions and the value of equity in retirement funds, annuities, and life insurance are included in the definition.

Wolff's synthetic estimates for 1969 are based on the Measurement of Economic and Social Performance (MESP) microdata file (Wolff 1983). This file contains information on income, asset holdings, debt, and socioeconomic characteristics for more than 60,000 households. Three statistical matches and two sets of imputations were used in constructing the file. Using a statistical match, each household in a 1970 decennial census sample that was estimated to have taxable income was assigned federal individual income tax return information. Information on owner-occupied housing was available in the census data. Other assets and liabilities were imputed to each household. Estimates of some asset values were obtained by capitalizing income flows. Imputation techniques using outside information were used for other asset types. The estimated values were then adjusted to produce consistency with national balance sheet estimates of the household sector. Household disposable wealth, as defined in the estimates shown, includes home equity, household durables (including automobiles) and inventories, liquid and investment assets (including trust equity), business equity, real estate, the cash value of insurance, and a small amount of cash value for pensions.

The eight estimates described above differed in many respects. The years to which the estimates referred ranged from 1962 (SFCC) to 1984 (SIPP). Thus, any changes in the distribution of wealth by age during this twenty-two-year period should be reflected in the estimates from these data sources. However, both the ISDP and the Pension Commission survey contained data for 1979, and the data from SIPP (1984) and the SCF (1983) are only one year apart.

The definitions of "net worth" differ among the data sources. Assets such as consumer durables, vehicle equity, and the cash value of life insurance are included in the estimates from some data sources but not in the estimates from others. The Pension Commission survey included the present value of retirement assets. Unsecured debt was not deducted in the estimates from the SFCC. Because of the differences in definitions of "net worth," the estimates from these data sources presented below should be used only for rough comparisons. For the purposes of this paper, only rough comparisons are needed.

12.2.2 Estimates of the Age-Wealth Relation

Eight selected estimates of relative mean net worth for age groups are shown in table 12.1. These estimates are from the seven different data sources described; as noted above, the definitions of "net worth" used are not strictly comparable. Also, the wealth-holding units and years are not comparable in some cases. The fifty-five to sixty-four age group is used as the base for these relative means. Six of the estimates are from household surveys, while the other two (Greenwood 1973; and Wolff 1969) are synthetic estimates.

The estimates of relative means are not very similar. The fifty-five to sixty-four age group has the highest mean for three estimates (SIPP, ISDP, and SFCC), although the SFCC might show a peak at an older age if more age detail were available. The two SCF estimates peak in aged age groups, while the Pension Commission estimate peaks in the forty-five to fifty-four age group. The two synthetic estimates peak in the aged age group.

The ranges of relative means for specific age groups are quite broad. For the sixty-five and over age group, the range is from 0.73 to 1.24. The range for the forty-five to fifty-four age group is from 0.68 to 1.04, and the range for the thirty-five to forty-four age group is from 0.42 to 0.83. Even if the comparison is confined to SIPP, SCF, ISDP, and SFCC (data sources for which relative medians are available in table 12.2), differences are still substantial, although smaller. The ranges then are 0.75–1.24 for the sixty-five and over group, 0.68–0.96 for the forty-five to fifty-four group, and 0.42–0.61 for the thirty-five to forty-four group.

When relative medians are examined (table 12.2), the differences are quite a bit smaller. Those estimates are available only for SIPP, SCF,

Table 12.1 **Selected Estimates of Relative Mean Net Worth by Age**

Age of Head	SIPP 1984	1983 SCF: Excluding High-Income Frame	1983 SCF: Including High-Income Frame	ISDP 1979	SFCC 1962	Pension Commission 1979	Greenwood 1973	Wolff 1969
Under 35	.17	. . .	.13	. . .	.19	.33	. . .	. . .
Under 25	. . .	.04	. . .	.08	. . .	. . .	.20	.28
25–34	. . .	.17	. . .	.23	. . .	. . .	.50	.43
35–44	.53	.43	.42	.61	.49	.83	.76	.58
45–54	.88	.68	.96	.75	.69	1.04	.91	.76
55–64	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
65 and over	.80	. . .	1.24	.75	.95	.73	1.06	1.02
65–74	. . .	1.05	. . .	. . .	. . .	. . .	. . .	. . .
65–69	.96	. . .	. . .	.85	. . .	. . .	. . .	. . .
70–74	.79	. . .	. . .	.81	. . .	. . .	. . .	. . .
75 and over	.69	.61	. . .	.62	. . .	. . .	. . .	. . .
All ages	.60	.55	.66	.59	.65	.63	.78	.72
Mean, all ages (thousands of current dollars)	78.7	66.0	133.5	62.4	21.0	54.0	37.7	46.0

Sources: SIPP: U.S. Bureau of the Census (1986b, table 3). SCF, excluding high-income frame: Avery et al. (1984b, table 7). SCF, including high-income frame: Avery and Elliehausen (1986, table 2). ISDP: Radner and Vaughan (1984, table 2). SFCC: Projector and Weiss (1966, table A8). Pension Commission: Cartwright and Friedland (1985, table 2). Greenwood: Greenwood (1987, table 2). Wolff: Wolff (1983, table 5).

Note: Net worth is defined differently in many of these estimates; see the text for details. Age 55–64 is used as the base for the relative means.

Table 12.2 Selected Estimates of Relative Median Net Worth by Age

Age of Head	SIPP 1984	1983 SCF: Excluding High-Income Frame	1983 SCF: Including High-Income Frame	ISDP 1979	SFCC 1962
Under 35	.08	. . .	.05	. . .	.08
Under 25	. . .	0	. . .	.07	. . .
25–34	. . .	.07	. . .	.24	. . .
35–44	.48	.52	.58	.58	.53
45–54	.77	.79	.79	.76	.83
55–64	1.00	1.00	1.00	1.00	1.00
65 and over	.82	. . .	.80	.75	.77
65–74	. . .	.90	. . .	. . .	. . .
65–69	.90	. . .	. . .	.92	. . .
70–74	.82	. . .	. . .	.88	. . .
75 and over	.75	.65	. . .	.55	. . .
All ages	.44	.44	.47	.50	.51
Median, all ages (thousands of current dollars)	32.7	24.6	30.6	25.8	6.7

Sources: SIPP: U.S. Bureau of the Census (1986b, table 5). SCF, excluding high-income frame: Avery et al. (1984b, table 7). SCF, including high-income frame: Avery and Elliehausen (1986, table 2). ISDP: Radner and Vaughan (1984, table 2). SFCC: Projector and Weiss (1966, table 8).

Note: Net worth is defined differently in many of these estimates; see the text for details. Age 55–64 is used as the base for the relative medians.

ISDP, and SFCC. In every case, the peak is in the fifty-five to sixty-four age group. The ranges are substantially smaller than they are for relative means: 0.75–0.82 for the sixty-five and over group, 0.76–0.83 for the forty-five to fifty-four group, and 0.48–0.58 for the thirty-five to forty-four group. Except for the youngest (under thirty-five) and oldest (seventy-five and over) age groups, the estimates are quite similar. This correspondence is reassuring, but it is far from proof of the accuracy of the estimates. The correspondence could result from offsetting errors or differences, or these surveys could have the same biases and all be inaccurate. These comparisons do show that the estimates of the age-wealth relation from the 1984 SIPP are at least roughly similar to the estimates from other surveys.

12.3 Wealth of Age Groups

In this section, a broad overall picture of wealth by age is presented. The middle of the wealth distribution is emphasized. Median and mean net worth, medians for selected definitions of wealth, median net worth by net worth quintile, and the composition of the net worth of the

middle 60 percent of the net worth distribution in each age group are examined using SIPP data for 1984. The focus here is on a comparison of the wealth of aged and nonaged units.

12.3.1 SIPP Data

Before the estimates are examined, a brief description of the SIPP wealth data is needed. One of the strengths of the SIPP data is the relatively large number of observations available for a survey that includes wealth data. The estimates shown in the remainder of this paper were made from a public use microdata file from wave 4 of the 1984 SIPP panel. These estimates are based on information for 18,701 households. Each age (of head) group shown in this paper includes more than 1,000 observations (table 12.3).[5] Thus, each quintile within an age group includes more than 200 observations. There are more than 3,900 households with an aged head, and the seventy-five and over age group contains almost 1,600 observations. This survey contains enough observations to be useful for the analysis of many subgroups of the aged.

The net worth concept used in the detailed tables in this paper is defined to be wealth minus unsecured debt. Wealth consists of the following five items: equity (market value minus debt) in owner-occupied homes; equity in motor vehicles; equity in business, professional practice, or farm; equity in rental property, vacation homes, and other real estate; and financial assets.[6] The financial assets category includes passbook savings accounts, money-market deposit accounts, certificates of deposit, interest-earning checking (e.g., negotiable order of withdrawal [NOW]) accounts, money-market funds, U.S. government securities, municipal or corporate bonds, stocks and mutual fund shares, U.S. savings bonds, IRAs and Keogh accounts, regular checking accounts, mortgages held for sale of real estate, amount due from sale

Table 12.3 **Sample Size and Weighted Number of Households by Age, 1984**

Age of Head	Number of Observations	Millions of Households
Under 25	1,342	5.7
25–34	4,161	20.1
35–44	3,592	17.4
45–54	2,885	12.6
55–64	2,787	12.9
65 and over	3,934	18.2
65–74	2,336	10.7
65–69	1,251	5.7
70–74	1,085	5.0
75 and over	1,598	7.5
All ages	18,701	86.9

of business or property, other interest-earning assets, and other financial assets. It should be noted that social security wealth and pension wealth are not included in wealth.

Unsecured debt includes credit card and store bills; doctor, dentist, hospital, and nursing home bills; loans from financial institutions and individuals; and educational loans. Although the value of household durables is not included in wealth, debt incurred to purchase those items is included in unsecured debt.

It is useful to comment on the accuracy of the wealth data contained in the 1984 SIPP. Most of the information about accuracy that does exist is in the form of comparisons between SIPP aggregates and control aggregates.[7] The Bureau of the Census has compared aggregates from the 1984 SIPP with Federal Reserve Board balance sheet data (U.S. Bureau of the Census 1986b, table D-3). They find that home equity is overstated in SIPP by 30 percent and that vehicle equity is overstated by 43 percent. On the other hand, equity in business and rental property, and financial assets are understated by about 25 percent. Unsecured debt is underestimated by about 35 percent. Although comparisons between survey wealth aggregates and wealth control aggregates are usually considered to be difficult and subject to substantial error, the pattern shown for SIPP is cause for some concern.

Item nonresponse rates are also a cause for concern. The market value of stock and mutual fund shares had a nonresponse rate of 41 percent (U.S. Bureau of the Census 1986b, table D-2). The item nonresponse rate for amount in checking accounts was 13 percent. Other financial assets shown by the Bureau of the Census had item nonresponse rates between those two figures. Missing values were imputed by the Bureau of the Census. It should be noted that nonresponse rates for asset ownership (as opposed to amounts) were very low; the highest rate shown was 2.2 percent for certificates of deposit (U.S. Bureau of the Census 1986b, table D-1).

12.3.2 Medians, Means, and Selected Definitions of Wealth

In this section, two important points that affect the analysis of wealth are illustrated. The first point is that whether medians or means are used makes an important difference for many analyses. As noted earlier, medians are more appropriate for the type of analysis discussed in this paper. Second, the definition of wealth used also makes an important difference. Amounts of wealth and the relation between the wealth of the aged and that of the nonaged are affected substantially by the choice of the definition.

Because of the skewed shape of the net worth distribution within each age group, mean net worth exceeds median net worth for every age group (table 12.4). Median net worth is quite low (below $10,000)

Table 12.4 **Median and Mean Net Worth by Age, 1984**

	Thousands of Dollars		Relative Values	
Age of Head	Median	Mean	Median	Mean
Under 25	2.2	7.2	.03	.06
25–34	8.1	24.8	.11	.21
35–44	35.5	62.4	.49	.54
45–54	56.4	98.7	.78	.85
55–64	72.5	115.6	1.00	1.00
65 and over	59.5	90.8	.82	.79
65–74	62.0	99.4	.86	.86
65–69	65.6	107.2	.90	.93
70–74	59.5	90.6	.82	.78
75 and over	54.6	78.4	.75	.68
All ages	32.5	69.2	.45	.60

for the under thirty-five age groups but rises to a peak of $72,500 in the fifty-five to sixty-four age group. Mean net worth is below $10,000 only for the under twenty-five age group and rises to a peak of $115,600 in the fifty-five to sixty-four age group. It is clear that median and mean amounts of net worth for each age group are quite different and that the choice between the two is important where dollar amounts are used. Of course, mean amounts are far more sensitive to values in the extremes of the wealth distribution and therefore are less appropriate here.

The ratio of mean to median net worth ranges from 1.44 for the seventy-five and over age group to 3.32 for the under twenty-five age group. In general, there is a downward trend in that ratio as age rises. Relative medians exceed relative means for most aged groups, although the differences are not large. Relative means are greater than relative medians for the younger age groups. Medians are focused on in this section.

The sensitivity of the age-wealth relation to the definition of wealth used is shown in tables 12.5 and 12.6. Table 12.5 shows medians and table 12.6 relative medians. For net worth, the medians for the aged groups are in a range of $11,000, from $54,600 for the seventy-five and over age group to $65,600 for the sixty-five to sixty-nine age group. There is a decline in median net worth as age increases within the aged group. The aged medians are roughly similar to the median for the forty-five to fifty-four age group and below the median for the fifty-five to sixty-four group. These relations are evident in table 12.6, which shows relative medians.[8]

When vehicle equity is excluded from net worth, the median falls by relatively small amounts (by $2,200–$6,000). The youngest age group now has a median of zero, and the peak is still in the fifty-five to sixty-four age

Table 12.5 **Median Amounts, 1984 (in thousands of dollars)**

	Definition of Wealth					
Age of Head	Net Worth	Net Worth, Excluding Vehicle Equity	Net Worth, Excluding Vehicle and Home Equity	Financial Assets minus Debt	Wealth	Financial Assets
Under 25	2.2	0	0	0	3.4	0.3
25–34	8.1	3.9	0	0	10.2	0.8
35–44	35.5	30.7	1.8	0.4	38.4	2.2
45–54	56.4	50.4	5.7	1.8	60.7	4.1
55–64	72.5	66.6	15.5	8.0	73.9	10.0
65 and over	59.5	55.8	14.9	10.5	60.0	10.9
65–74	62.0	59.3	15.0	11.0	62.5	11.7
65–69	65.6	61.4	16.2	12.0	66.2	13.0
70–74	59.5	55.6	13.3	10.5	60.0	10.7
75 and over	54.6	51.3	14.3	10.0	54.6	10.1
All ages	32.5	28.4	2.6	1.1	35.0	2.6

Note: Medians are for everyone in the age group.

Table 12.6 **Relative Medians for Alternative Definitions of Wealth, by Age, 1984**

Age of Head	Net Worth	Net Worth Excluding Vehicle Equity	Net Worth Excluding Vehicle and Home Equity	Financial Assets Minus Debt	Wealth	Financial Assets
Under 25	.03	0	0	0	.05	.03
25–34	.11	.06	0	0	.14	.08
35–44	.49	.46	.12	.06	.52	.22
45–54	.78	.76	.37	.23	.82	.41
55–64	1.00	1.00	1.00	1.00	1.00	1.00
65 and over	.82	.84	.96	1.31	.81	1.09
65–74	.86	.89	.97	1.38	.85	1.17
65–69	.90	.92	1.05	1.50	.90	1.30
70–74	.82	.83	.86	1.31	.81	1.07
75 and over	.75	.77	.93	1.25	.74	1.01
All ages	.45	.43	.17	.14	.47	.26

Note: Age 55–64 is used as the base.

group ($66,600). Relative medians rise very slightly for the aged groups and fall substantially for the youngest groups.

When home equity is excluded from net worth minus vehicle equity, there is a much larger effect. However, that effect differs widely among the age groups. The youngest group (which already has a median of zero) shows no change, and the twenty-five to thirty-four group shows a decline of only $3,900. In contrast, the fifty-five to sixty-four group shows a fall of $51,100. All age groups under fifty-five now have medians under $10,000, while all age groups are under $20,000. The peak is now in the sixty-five to sixty-nine group at $16,200. The relation as age rises is not smooth, with an increase through the fifty-five to sixty-four group followed by small increases and decreases. Relative to the median for the fifty-five to sixty-four age group, medians rose substantially for most aged groups and fell substantially for the thirty-five to fifty-four age groups. It should be noted that mean amounts for this definition (not shown) are several times the medians. For example, the mean for the sixty-five and over group is $48,700, while the median is only $14,900.

A less comprehensive definition is financial assets minus unsecured debt. Declines in moving to that definition from net worth excluding vehicle and home equity range from zero for the youngest groups to $7,500 for the fifty-five to sixty-four group. All nonaged groups now have medians under $10,000, and the highest median for any age group is only $12,000 (for age sixty-five to sixty-nine). There is a smooth rise in medians until the peak, then a smooth decline. Relative to the median for the fifty-five to sixty-four age group, medians rose substantially for the aged groups and fell for the thirty-five to fifty-four age groups. Mean amounts are still several times the medians, with the mean for the sixty-five and over group ($36,300) about three and a half times the median for that group.

Two definitions in which unsecured debt is not subtracted are now examined. The wealth medians are slightly above the net worth medians, with the differences ranging from less than $100 to $4,300. The relative values for wealth are very similar to those for net worth. The financial asset medians are slightly above the financial asset minus debt medians, with the aged groups showing small differences. The peak is still in the sixty-five to sixty-nine age group. Relative medians differ from those for financial assets minus debt. When only financial assets are considered, the relative medians are substantially higher for the under fifty-five groups and lower for the aged groups. For example, the relative median for the sixty-five and over group falls from 1.31 to 1.09.

In summary, medians for the aged rose slightly relative to medians for nonaged groups when vehicle equity was omitted from net worth

and rose more sharply when home equity was also omitted. When the definition was changed to financial assets minus debt, medians for the aged rose very sharply relative to medians for the nonaged. Relative medians for all age groups are similar for wealth and net worth. Relative medians for the aged are relatively lower for financial assets than for financial assets minus debt. It can be seen from tables 12.5 and 12.6 that the choice of a definition of wealth can make an important difference in comparisons of the aged and nonaged.

12.3.3 Median Net Worth by Net Worth Quintile

Median net worth by age and net worth quintile (within age group) is shown in table 12.7. Median net worth is very low in the bottom quintile for all age groups, ranging from minus $1,300 in the under twenty-five group to $2,400 in the fifty-five to sixty-four group. In the second quintile, the median for each age group is below $36,000. In every age group, the median for the second quintile is less than half the overall median for the age group. In contrast, the top quintile shows medians above $150,000 for all age groups thirty-five and over.

Within each quintile, the age pattern is roughly similar—low amounts at the young ages, a peak in the fifty-five to sixty-four group, and declines among the aged groups. It is interesting to note that, for each of the top four quintiles, median net worth declines within the aged group as age rises. The decline between the sixty-five to sixty-nine and the seventy-five and over age groups is 26 percent for the second quintile, 17 percent for the third quintile, 15 percent for the fourth quintile, and 18 percent for the top quintile.

Table 12.7 **Median Net Worth by Age and Net Worth Quintile, 1984 (in thousands of dollars)**

	Net Worth Quintile				
Age of Head	1	2	3	4	5
Under 25	−1.3	.2	2.2	5.6	18.1
25–34	−.6	1.7	8.1	23.1	65.6
35–44	0	11.3	35.5	66.6	152.1
45–54	.5	23.3	56.4	97.8	205.3
55–64	2.4	35.3	72.4	118.9	245.4
65 and over	.8	26.7	59.5	99.3	200.1
65–74	.8	29.0	62.0	103.8	209.6
65–69	1.1	32.6	65.6	108.7	219.7
70–74	.5	24.4	59.4	96.5	197.6
75 and over	.7	24.0	54.6	92.5	181.1
All ages	0	7.5	32.5	71.7	166.9

Note: Quintiles are defined within each age group.

The medians for all groups under age fifty-five rise relative to the median for the aged as net worth increases. For example, the median for the thirty-five to forty-four age group rises from zero in the bottom quintile to 76 percent of the median for the aged in the top quintile, and the median for the forty-five to fifty-four age group rises from 68 percent of the median for the aged in the lowest quintile to 102 percent in the top quintile.

12.3.4 Wealth of the Middle 60 Percent of Households

In this section, the asset types held, the mean amounts of those assets, and the percentage composition of net worth are examined for the middle 60 percent of the net worth distribution of each age group. Households in the top and bottom net worth quintiles are excluded because the focus here is on "typical" households in each age group (i.e., households that do not have extreme amounts of net worth). Estimates of amounts for the age group as a whole can be affected by a few very high amounts and by negative amounts. Some roughly comparable estimates for entire age groups appear in a Bureau of the Census report (U.S. Bureau of the Census 1986b).

The percentages of households holding various components of net worth are shown in table 12.8. Compared with nonaged households, aged households show a higher percentage with home equity but lower percentages with vehicle equity, business equity, and unsecured debt. Home equity is held by 84 percent of the aged group. This is higher than the percentages shown by the under forty-five age groups and lower than the percentages shown by the forty-five to sixty-four age groups (90–91 percent). Only 10 percent of the under twenty-five group and 42 percent of the twenty-five to thirty-four group have home equity. Within the aged group, the percentage with home equity declines from 89 percent in the sixty-five to sixty-nine age group to 81 percent in the seventy-five and over group. Even the seventy-five and over age group has a higher percentage than the under forty-five age groups. The percentages with home equity for the middle 60 percent are above the percentages for the entire age group (not shown) for all age groups thirty-five and over. For example, the entire sixty-five and over group shows 73 percent with home equity, compared to 84 percent for the middle 60 percent.

Vehicle equity is held by 76 percent of aged households. This figure is below the percentage for each nonaged age group. The percentage within the aged group falls from 88 percent in the sixty-five to sixty-nine age group to 63 percent in the seventy-five and over age group. The percentage with business equity is very low among the aged and reaches a peak of only 11 percent in the forty-five to fifty-four age group. Real estate reaches a peak of 22 percent in the fifty-five to

Table 12.8 **Percentage Holding Specific Asset Types, Households with Medium Net Worth, by Age, 1984**

	Type of Asset or Debt					
Age of Head	Home Equity	Vehicle Equity	Financial Assets	Business Equity	Real Estate	Unsecured Debt
Under 25	10	82	72	2	1	58
25–34	42	96	85	6	6	78
35–44	79	96	92	10	14	81
45–54	90	98	93	11	20	79
55–64	91	94	93	9	22	66
65 and over	84	76	93	3	12	38
65–74	87	86	92	3	14	44
65—69	89	88	92	3	16	46
70–74	84	82	93	4	12	40
75 and over	81	63	94	1	10	30
All ages	71	91	90	8	12	69

Note: Medium net worth is defined as the middle 60 percent of the net worth distribution in each age group.

sixty-four age group and is somewhat lower among the aged (10–16 percent). The percentage with unsecured debt is highest in the twenty-five to fifty-four age groups (78–81 percent) and falls to 38 percent in the sixty-five and over group. Only 30 percent of the seventy-five and over age group has unsecured debt.

Financial assets are held by more than 90 percent of all groups age thirty-five and over. The percentages of the middle 60 percent holding selected components of financial assets are shown in table 12.9. Savings accounts are held by roughly two-thirds of all households, with relatively little variation among age groups. Money-market accounts are more prevalent among the aged (23 percent) than among the nonaged, as are certificates of deposit (38 percent for the aged). Interest-earning checking accounts show less variation among age groups, with the aged showing a slightly higher percentage (29 percent) than the nonaged. Stocks and mutual funds are most prevalent in the thirty-five to sixty-four age groups (21–22 percent), but the aged percentage is not much lower (17 percent). U.S. savings bonds are also most prevalent in the thirty-five to sixty-four age groups (19–20 percent); 12 percent of the aged hold such bonds. The fifty-five to sixty-four age group shows the highest percentage with an IRA (40 percent), while only 6 percent of the aged have an IRA. The sixty-five to sixty-nine age group shows 12 percent with an IRA, but only 3 percent of the seventy-five and over group have an IRA. In summary, aged households show higher percentages than nonaged households for money-market accounts, certificates of deposit, and interest-earning checking accounts and lower percentages for U.S. savings bonds and IRAs.

Mean amounts of the various asset types are shown for the middle 60 percent in table 12.10. These means are for all households in the middle 60 percent of the age group, not just for those with the specific asset type. For each age group, mean amounts of vehicle equity, business equity, and real estate are all quite low—below $7,000. The sum of these three asset types minus unsecured debt is below $11,000 for each age group. For aged households, the sum is $6,200, compared with means of $35,200 for home equity and $20,900 for financial assets. Thus, in an absolute sense, these asset types are not very important for the middle 60 percent. However, it should be noted that vehicle equity is relatively important for the under thirty-five age groups.

The relative importance of each asset type for each age group can be seen in table 12.11. Financial assets are more important for aged households than for nonaged households, while home equity is slightly less important for the aged than for the nonaged. Home equity is at least 55 percent of net worth for each age group thirty-five and over. The percentage declines from a peak of 67 percent in the thirty-five to forty-four age group as age rises. The percentage accounted for by

Table 12.9 **Percentage Holding Selected Financial Assets, Households with Medium Net Worth, by Age, 1984**

	Type of Asset						
Age of Head	Savings Accounts	Money-Market Accounts	Certificates of Deposit	NOW Accounts[a]	Stocks or Mutual Funds	U.S. Savings Bonds	IRA
Under 25	52	2	2	14	4	9	2
25–34	63	6	7	21	13	13	10
35–44	71	11	12	23	21	19	18
45–54	72	13	18	23	21	19	29
55–64	71	21	30	27	22	20	40
65 and over	67	23	38	29	17	12	6
65–74	67	25	39	29	17	14	8
65–69	67	26	37	30	19	15	12
70–74	67	23	40	28	17	13	4
75 and over	66	21	39	29	18	10	3
All ages	67	12	17	23	17	16	16

Note: Medium net worth is defined as the middle 60 percent of the net worth distribution in each age group.

[a]Includes all interest-bearing checking accounts.

Table 12.10 **Mean Amounts of Specific Asset Types, Households with Medium Net Worth, by Age, 1984 (in thousands of dollars)**

	Type of Asset or Debt						
Age of Head	Net Worth	Home Equity	Vehicle Equity	Financial Assets	Business Equity	Real Estate	Unsecured Debt
Under 25	2.8	.4	2.4	.9	0	0	.9
25–34	11.5	5.9	3.8	2.8	.4	.6	1.9
35–44	38.7	25.9	5.0	6.5	1.2	2.6	2.6
45–54	60.2	39.7	6.3	11.1	2.0	4.6	3.4
55–64	76.3	46.2	5.8	19.4	1.5	5.5	2.1
65 and over	62.3	35.2	3.2	20.9	.4	3.1	.5
65–74	65.7	37.9	4.0	20.8	.5	3.3	.7
65—69	70.2	40.3	4.5	21.7	.8	4.0	1.0
70–74	61.0	34.8	3.6	20.0	.4	2.8	.5
75 and over	57.5	31.5	1.9	21.5	.2	2.7	.3
All ages	38.3	23.9	4.5	8.7	1.0	2.3	2.1

Note: Medium net worth is defined as the middle 60 percent of the net worth distribution in each age group. Mean amounts are for all households in the group, not just for those holding the asset.

Table 12.11 **Percentage Composition of Net Worth, Households with Medium Net Worth, by Age, 1984**

	Type of Asset or Debt						
Age of Head	Net Worth	Home Equity	Vehicle Equity	Financial Assets	Business Equity	Real Estate	Unsecured Debt
Under 25	100	14	84	31	1	1	32
25–34	100	52	33	24	3	5	17
35–44	100	67	13	17	3	7	7
45–54	100	66	10	18	3	8	6
55–64	100	61	8	25	2	7	3
65 and over	100	57	5	34	1	5	1
65–74	100	58	6	32	1	5	1
65–69	100	57	6	31	1	6	1
70–74	100	57	6	33	1	5	1
75 and over	100	55	3	37	0	5	1
All ages	100	62	12	23	3	6	5

Note: Medium net worth is defined as the middle 60 percent of the net worth distribution in each age group.

financial assets is highest in the seventy-five and over age group (37 percent) and lowest in the thirty-five to forty-four age group (17 percent). Within the aged group, there is a small shift from home equity to financial assets between the sixty-five to sixty-nine and the seventy-five and over age groups. Home equity is roughly four times as important as financial assets for the thirty-five to fifty-four age groups but is less than twice as important for the aged. These percentages are quite different when the entire age group (not just the middle 60 percent) is used. For the aged, home equity (42 percent) and financial assets (41 percent) are of about equal importance in that case.

In summary, home equity and financial assets dominate the net worth of the middle 60 percent of aged households. Financial assets are relatively more important for aged households than for nonaged households. Vehicle equity and unsecured debt are important primarily for younger households.

12.4 Wealth of Age and Income Groups

In assessing the economic well-being of households, the relation between income and wealth is very important. Both income and wealth should be taken into account when economic well-being is examined. In most cases, income alone is used as the classifier for assessing economic status.

Several different methods of using income and wealth data together have been used by researchers. Perhaps the most widely used type of method converts the stock of wealth into a flow and adds that flow to the flow of income. In that method, wealth is converted into an annuity for the expected remaining life of the unit (e.g., Murray 1964; Weisbrod and Hansen 1968; Taussig 1973; Wolfson 1979). Moon (1977) has applied this method to the aged. In a variant of the simple annuity approach, the annuity allows the unit to reach the same utility level as its optimal consumption path, rather than the highest constant consumption path (Nordhaus 1973; Irvine 1980; Beach 1981).

Comparing different age groups using the annuity approach has been criticized on the grounds that the method does not take into account the likelihood that the incomes of young units will rise and that those units ordinarily will be able to increase their wealth as they age (Projector and Weiss 1969). Some researchers have tried to take this into account essentially by estimating future earnings (Nordhaus 1973; Taussig 1973; Irvine 1980).

Some researchers have combined income and wealth by converting income flows into stocks of wealth and adding that wealth to other types of wealth. For example, in looking at the aged, Hurd and Shoven (1982) capitalized several sources of income and added those values

to estimates of wealth. Also, for limited purposes, some researchers have taken a simpler approach to combining income and wealth and summed current income and liquid assets (David 1959; Steuerle and McClung 1977) or income and net worth (Steuerle and McClung 1977).

Radner and Vaughan (1984, 1987) and Radner (1984), in looking at a short time horizon, did not combine income and wealth. They considered income and wealth jointly as a two-dimensional classification and examined such characteristics of the joint distribution as the percentage of each age group that had relatively low wealth and relatively low income.

In this section, the amounts of wealth held by different relative income groups within age groups are examined. It should be noted that this is a purely descriptive exercise. Double counting of income and assets is not a concern here; such concerns are important in an analytic use of the data. Thus, income includes asset income and wealth income-producing assets in the estimates shown here.

The income classifications used require some explanation. The income definition is total household money income for the four-month period preceding the interview. (In some of the estimates, this four-month income is "annualized" by multiplying it by three.) The income amounts are adjusted for household size using an equivalence scale based on the scale implicit in the U.S. poverty thresholds.[9] Then, within each age group, households are separated into quintile groups based on the size of their adjusted total money income. There is a presumption that, within each age group, households in higher-income quintiles are "better off" than those in lower-income quintiles. The wealth of households in these different income quintiles is examined. Although all age groups are examined, there is more emphasis on the aged than the nonaged.

12.4.1 Median Amounts

Table 12.12 shows median net worth by adjusted income quintile and age. Aged households with low income typically have small amounts of net worth. Median net worth is only $13,400 for the bottom income quintile of aged households. This is far below the overall median of $59,500 for aged households. The second income quintile of aged households shows a median ($31,200) that is only 52 percent of that overall median. Median net worth for the aged rises as income rises, reflecting the substantial correlation between income and net worth. All other age groups also have low medians for the bottom income quintile. Median net worth is below $8,000 for the bottom income quintile for each age group under age fifty-five. For the under thirty-five age groups, median net worth is low for all income groups. The bottom three income quintiles show peaks in the fifty-five to sixty-four age group, but the

Table 12.12 **Median Net Worth by Adjusted Income Quintile and Age, 1984 (in thousands of dollars)**

	Income Quintile				
Age of Head	1	2	3	4	5
Under 25	0	1.3	2.5	3.8	4.8
25–34	.6	5.3	8.8	12.5	25.4
35–44	5.0	24.1	37.9	45.2	78.5
45–54	7.9	38.8	58.0	71.9	115.0
55–64	20.0	54.1	67.0	89.1	163.7
65 and over	13.4	31.2	61.2	82.5	153.4
65–74	8.7	40.6	63.9	85.5	163.8
65–69	13.0	43.7	65.5	89.5	178.1
70–74	6.9	35.0	57.5	90.3	142.2
75 and over	16.7	25.2	56.6	79.0	143.5
All ages	3.3	20.9	33.2	47.8	87.8

Note: Income quintiles are based on income adjusted for household size and are defined within age groups.

seventy to seventy-four age group has the highest median in the fourth income quintile, and the sixty-five to sixty-nine age group has the highest median in the top quintile.

Table 12.13 shows median financial assets by adjusted income quintile and age. Of course, these medians would be expected to be far below the medians shown in table 12.12, primarily because home equity is excluded here, and that is the case. The bottom quintile of aged households has a median of only $400, and the second quintile has a median

Table 12.13 **Median Financial Assets by Adjusted Income Quintile and Age, 1984 (in thousands of dollars)**

	Income Quintile				
Age of Head	1	2	3	4	5
Under 25	0	.1	.3	.6	1.4
25–34	0	.3	.8	1.7	5.2
35–44	.1	.8	2.1	4.3	12.8
45–54	0	1.7	3.9	7.4	24.5
55–64	.1	4.0	10.0	18.2	46.5
65 and over	.4	3.2	15.0	24.2	63.3
65–74	.1	4.0	12.4	25.5	63.9
65—69	.2	5.6	10.2	31.0	68.0
70–74	.1	3.0	12.5	26.0	60.7
75 and over	.6	2.7	13.0	30.0	62.7
All ages	0	1.0	2.5	4.8	16.8

Note: Income quintiles are based on income adjusted for household size and are defined within age groups.

of only $3,200. These amounts are too small to cover substantial unexpected expenses. In the bottom income quintile, median financial assets is below $1,000 in every age group. The second quintile shows a peak of $5,600, and the highest median in the third quintile is $15,000. It is only the aged in the fourth quintile and age groups forty-five and over in the top quintile that show medians of over $20,000. In the top four income quintiles, the aged have high medians compared to most nonaged groups.

12.4.2 Wealth of Aged Households

Tables 12.14–12.16 show the composition of the wealth of the age sixty-five and over group by adjusted income quintile. In table 12.14, the majority of each income quintile has home equity, with a peak of 85 percent in the top quintile. There is a substantial rise in the percentage as income rises. The percentage with vehicle equity also rises sharply as income rises; only 41 percent of the bottom quintile have that asset. Business equity is held by less than 10 percent in each quintile. The percentage with real estate also shows a strong rise as income increases, with a peak of 30 percent in the top quintile. The percentage with unsecured debt shows a relatively small increase as income rises, with a range from 32 to 45 percent.

The percentage with financial assets exhibits a strong increase as income rises, with most of the increase occurring between the first and the third quintiles. Table 12.15 shows the percentage of aged households holding selected financial assets. The percentage holding each of these assets rises sharply as income rises. Savings accounts are held by 39 percent of the bottom quintile and 76 percent of the top quintile. Savings accounts are the only financial asset shown here that is held by a substantial proportion of the bottom income quintile. The percentages

Table 12.14 **Percentage Holding Specific Asset Types, by Adjusted Income Quintile, Age 65 and Over, 1984**

	Type of Asset or Debt					
Income Quintile	Home Equity	Vehicle Equity	Financial Assets	Business Equity	Real Estate	Unsecured Debt
1	56	41	65	2	7	32
2	64	56	84	2	9	34
3	76	79	94	3	16	38
4	82	88	97	4	20	45
5	85	93	99	8	30	45
Total	73	71	88	4	16	39

Note: Income quintiles are based on income adjusted for household size and are defined within the age group.

Table 12.15 **Percentage Holding Selected Financial Assets, by Adjusted Income Quintile, Age 65 and Over, 1984**

Income Quintile	Type of Financial Asset						
	Savings Accounts	Money-Market Accounts	Certificates of Deposit	NOW Accounts[a]	Stocks or Mutual Funds	U.S. Savings Bonds	IRA
1	39	6	12	10	2	2	1
2	54	12	28	19	9	6	3
3	68	23	42	30	17	12	5
4	74	32	44	38	25	16	10
5	76	47	55	53	51	21	21
Total	63	24	36	30	21	11	8

Note: Income quintiles are based on income adjusted for household size and are defined within the age group.
[a]Includes all interest-bearing checking accounts.

Table 12.16 **Percentage Composition of Net Worth, by Adjusted Income Quintile, Age 65 and Over, 1984**

Income Quintile	Type of Asset or Debt						
	Net Worth	Home Equity	Vehicle Equity	Financial Assets	Business Equity	Real Estate	Unsecured Debt
1	100	72	4	15	1	9	1
2	100	60	4	27	3	7	1
3	100	51	4	34	2	10	1
4	100	46	5	35	2	13	1
5	100	30	3	51	3	12	1
Total	100	42	4	41	3	11	1

Note: Income quintiles are based on income adjusted for household size and are defined within the age group.

of the bottom and top quintiles, respectively, that hold specific types of financial assets are: 6 and 47 percent for money-market accounts, 12 and 55 percent for certificates of deposit, 10 and 53 percent for interest-earning checking accounts, 2 and 51 percent for stocks and mutual funds, 2 and 21 percent for U.S. savings bonds, and 1 and 21 percent for IRAs. The second income quintile holds primarily savings accounts and certificates of deposit. U.S. savings bonds and IRAs are not very prevalent, even among households in the top income quintile.

Table 12.16 shows the composition of net worth.[10] This table is affected to a degree by problems in estimating the upper tail of the wealth distribution. Home equity accounts for more than half of net worth for each of the bottom three income quintiles. Home equity is also the most important component for the fourth quintile, but financial assets are the most important in the top quintile. For the aged group as a whole, home equity and financial assets are about equally important because of the dominance of the top quintile. Vehicle equity, business equity, and unsecured debt are not very important in any quintile. Real estate is slightly more important at higher income levels than at lower levels.

12.4.3 Ratio of Wealth to Income

Another way of examining the importance of wealth is to look at the ratio of wealth to income. Table 12.17 shows the ratio of median financial assets to median annualized income by age and adjusted income quintile. The bottom quintile of each aged group shows a low ratio (0.08 for all the aged), and the ratios for the second quintile are only

Table 12.17 **Ratio of Median Financial Assets to Median Annualized Income, by Adjusted Income Quintile and Age, 1984**

	Income Quintile					
Age of Head	1	2	3	4	5	Total
Under 25	0	.01	.02	.03	.04	.02
25–34	0	.02	.04	.06	.12	.04
35–44	.01	.04	.07	.11	.23	.08
45–54	0	.08	.13	.18	.39	.13
55–64	.02	.28	.43	.54	.79	.42
65 and over	.08	.41	1.22	1.32	1.90	.87
65–74	.02	.43	.89	1.28	1.79	.82
65–69	.03	.53	.66	1.38	1.79	.82
70–74	.02	.37	1.01	1.48	1.89	.86
75 and over	.13	.42	1.30	1.99	2.19	.99
All ages	0	.07	.12	.16	.33	.12

Note: Income quintiles are based on income adjusted for household size and are defined within age groups.

in the 0.37–0.53 range. These estimates confirm the earlier findings that lower-income aged households typically have only small amounts of financial assets. The top quintile in the aged groups demonstrates ratios in the 1.79–2.19 range. All quintiles in all nonaged groups show median financial assets less than median annualized income. For the youngest age groups, the ratios are quite small; the ratios are below 0.25 in all quintiles under age forty-five.

A second way of examining the age-wealth-income relation is by looking at the distribution of households by their ratio of wealth to income. Here, the ratio of financial assets to income is used. Those distributions by age are shown in table 12.18. The most important result in this table is the large dispersion present in the ratios for aged households. For the aged group as a whole, 25 percent had ratios under 0.10 (including zero), 26 percent had ratios from 0.10 to 1.00, 15 percent had ratios from 1.00 to 2.00, and one-third of the group had ratios of 2.00 or more. The percentages for the aged do not differ much within the aged group. In contrast, the youngest groups show far less dispersion. Only 2 percent of the under twenty-five age group had financial assets exceeding annualized income, and only 5 percent had financial assets that were more than half of income. For that age group, 26 percent had no financial assets, and 55 percent had a positive ratio less than 0.10. The forty-five to sixty-four age groups show less dispersion than the aged but more than the youngest age groups.

Table 12.19 shows the distribution of aged households by the ratio of financial assets to annualized income, by adjusted income quintile.

Table 12.18 **Percentage Distribution of Households by the Ratio of Financial Assets to Annualized Income, by Age, 1984**

Age of Head	Zero Financial Assets	Ratio						
		Under .1	.1–.3	.3–.5	.5–1.0	1.0–2.0	2.0 and over	Total[a]
Under 25	26	55	11	3	3	1	1	99
25–34	19	48	18	6	4	2	2	99
35–44	13	41	19	8	9	5	3	100
45–54	13	32	19	9	12	7	6	100
55–64	12	21	13	10	14	13	17	100
65 and over	12	13	10	6	10	15	33	100
65–74	13	14	10	7	11	16	30	100
65–69	12	14	10	7	11	18	28	100
70–74	14	14	9	6	10	14	32	100
75 and over	11	12	10	6	10	14	37	100
All ages	15	34	16	7	9	8	11	100

[a]A few households with zero or negative income are not shown.

Table 12.19 **Percentage Distribution of Households by the Ratio of Financial Assets to Annualized Income, by Adjusted Income Quintile, Age 65 and Over, 1984**

Income Quintile	Zero Financial Assets	Ratio						
		Under .1	.1–.3	.3–.5	.5–1.0	1.0–2.0	2.0 and Over	Total[a]
1	35	18	12	6	6	9	13	99
2	16	17	11	7	11	12	25	100
3	6	13	10	7	10	16	38	100
4	3	11	10	7	14	17	39	100
5	1	6	7	6	11	23	47	100

Note: Income quintiles are based on income adjusted for household size and are defined within the age group.

[a]A few households with zero or negative income are not shown.

When the aged group is separated into income quintiles, substantial dispersion is still present in each quintile. This suggests that using income data alone is not likely to capture the major effects on well-being of holdings of financial assets. Not surprisingly, the percentage distributions differ greatly by income quintile. For the bottom quintile, 53 percent had either zero financial assets or a positive ratio under 0.10. That percentage falls sharply to 7 percent in the top quintile. Only 22 percent of the bottom quintile had a ratio of at least 1.00, but 70 percent of the top income quintile had a ratio of at least 1.00.

12.4.4 Low Income and Low Wealth

Another way of taking account of both income and wealth is to examine a portion of their joint distribution. In particular, the portion of the joint distribution that includes relatively low income and relatively low wealth is considered here. Two different definitions of wealth, net worth and financial assets, are used, and the results for the two are compared. Relatively low income is defined as being in the bottom income quintile of the all-ages distribution, after adjustment for size of unit. Relatively low net worth (financial assets) is defined as being in the bottom two net worth (financial asset) quintiles of the all-ages distribution, after adjustment for size of unit.

The bottom two quintiles are used for net worth and financial assets because those distributions are so skewed. The bottom quintile contains very small amounts, and the amounts in the second quintile are still not very large. In terms of amounts adjusted for size of unit, the upper bound of the bottom net worth quintile is only $1,423, and the upper bound of the second net worth quintile is $11,760.[11] The corresponding bounds for financial assets are $50 and $753, respectively. It can be

seen that these are not very large amounts. The upper bound of the bottom quintile of annualized income (adjusted for size of unit) is $7,212.

The percentage of households in each age group with low income and low wealth is shown in table 12.20. For all ages, 13.2 percent of households had low income and low net worth. In general, the pattern is high percentages at young and old ages and lower percentages at ages in between.[12] The percentages range from a low of 8.4 percent for the fifty-five to sixty-four age group to 24.6 percent for the under twenty-five age group. Aged households show 13.3 percent, with a range from 10.2 percent for the youngest aged (aged sixty-five to sixty-nine) to 15.3 percent for the oldest aged (aged seventy-five and older).

The percentages for aged households show that, despite high median net worth compared to most other age groups, a relatively high percentage of aged households have low income and low net worth. This relatively high percentage results primarily from the high percentage of aged households in the bottom income quintile (table 12.20). For the aged, 28.0 percent were in the bottom income quintile, but only 48 percent (13.3/28.0) of those were also in the bottom two net worth quintiles. In contrast, 94 percent of households in the youngest age group in the bottom income quintile were also in the bottom two net worth quintiles.

Table 12.20 **Percentage of Households with Low Income and Low Wealth, by Age of Head, 1984**

Age of Unit Head	With Low Income and Low Net Worth[a]	With Low Income and Low Financial Assets[b]	In Bottom Income Quintile
Under 25	24.6	23.4	26.3
25–34	16.8	16.9	19.1
35–44	11.8	13.5	16.8
45–54	9.2	11.2	14.3
55–64	8.4	11.9	17.3
65 and older	13.3	14.9	28.0
65–74	12.0	14.1	23.1
65–69	10.2	12.0	19.1
70–74	14.0	16.5	27.7
75 and older	15.3	15.9	35.0
All Ages	13.2	14.6	20.0

[a]Low income is defined as the bottom income quintile for all ages, and low net worth is defined as the bottom two net worth quintiles for all ages, in both cases after adjustment for size of unit.

[b]Low income is defined as the bottom income quintile for all ages, and low financial assets is defined as the bottom two financial asset quintiles for all ages, in both cases after adjustment for size of unit.

The results for low income and low financial assets show a less pronounced relation to age, although the general pattern is similar. The percentage for all ages is slightly higher than for net worth (14.6 percent). The range for financial assets is smaller, from 11.2 percent for the forty-five to fifty-four age group to 23.4 percent for the under twenty-five age group. Aged households show 14.9 percent with low income and low financial assets, which is slightly above the percentage found when net worth was used. Thus, in the bottom income quintile, the proportion of aged households with low financial assets (53 percent) is slightly higher than the proportion with low net worth. Aged households have higher median financial assets than net worth relative to other age groups. Despite this, the percentage of aged households with low income and low financial assets is higher than for most other age groups.

This examination of a portion of the joint distribution of income and wealth has shown that, despite the relatively high median amounts of wealth held by the aged, the proportion of aged households with both low income and low wealth is not relatively low. The relatively high percentage of aged households in the bottom income quintile is an important factor here.

12.5 Summary and Conclusions

This paper reflects a somewhat different perspective on the use of wealth data. The emphasis is on analyzing the economic status of ordinary (nonrich) units. Also, there is a particular interest in age groups, with the emphasis on the aged. Selected estimates of wealth for 1984 from SIPP are presented. These estimates are illustrations of several types of useful wealth estimates that can be made from household survey data.

Types of wealth estimates are discussed, and the characteristics of wealth data that are important for the analysis of economic status are examined. Estimates of the age-wealth cross-sectional relation are compared for five household surveys and two synthetic estimates. These estimates differ in definition of wealth, wealth-holding unit, and time period. Although relative mean amounts from the different data sources differ widely, relative medians are quite similar. Estimates of relative medians from the 1984 SIPP are similar to those from the other data sources examined.

Estimates of net worth from the 1984 SIPP show that the mean far exceeds the median in each age group. When home equity and vehicle equity are excluded from net worth, all age groups show medians of under $17,000, with the peak in the sixty-five to sixty-nine age group. Medians for financial assets minus debt also peak in the sixty-five to sixty-nine age group ($12,000). When net worth quintiles within age

groups are examined, median net worth is very low in the bottom quintile in each age group.

An examination of the middle 60 percent of the net worth distribution in each age group shows that, except for the under twenty-five group, home equity is by far the most important asset for each age group. Home equity accounts for 57 percent of the net worth of the aged, while financial assets account for 34 percent.

When wealth is examined for income quintiles (based on income adjusted for household size) within age groups, median net worth is low for the bottom income quintile for each age group. Median financial assets is low for the bottom three quintiles in every age group. For the bottom income quintile in the aged group, home equity constitutes 72 percent of net worth, and financial assets account for 15 percent. For the top income quintile of the aged group, home equity accounts for only 30 percent, while financial assets account for 51 percent of net worth.

Ratios of median financial assets to median annualized income are below 1.00 for all income quintiles in each nonaged group. The ratio exceeds 1.00 for higher-income aged households. Large dispersion in the distribution of the ratio of financial assets to annualized income is found for aged households. That dispersion is still substantial within each income quintile of the aged. More than 80 percent of households in the under twenty-five age group have financial assets that are less than 10 percent of their annualized income. For the aged, the corresponding figure is 25 percent. For the aged, that percentage ranges from 53 percent for the bottom income quintile to only 7 percent in the top income quintile.

When the percentage of households in each age group with relatively low income and relatively low wealth is examined, a pattern of high percentages at young and old ages, with lower percentages at ages in between, is found. Aged households show 13.3 percent with low income and low wealth, which is about equal to the percentage for all households and is greater than the percentage for most nonaged age groups. When financial assets is used instead of net worth, the results are similar.

Thus, data on wealth from the 1984 SIPP show that many aged households have little wealth to use in emergencies. This is similar to findings from the 1979 ISDP and from other data sources. Also, a great deal of dispersion in amounts of financial assets was found among the aged, even within income quintiles. This finding suggests that using income data alone does not capture important aspects of the distribution of well-being among the aged.

Wealth data from household surveys were the most appropriate for the analysis in this paper. Although wealth data from a household

survey can be very useful for many purposes, such data still have many problems, such as high nonresponse rates and substantial response error. Much further research on the estimation of the distribution of wealth using survey data and other methods is needed.

Notes

1. For a recent discussion of types of wealth estimates and data on wealth, see Smith (1987).

2. For discussions of the accuracy of survey data on wealth, see, e.g., Ferber (1966) and Ferber et al. (1969).

3. For example, estimates of the change in inequality presented in a Joint Economic Committee (1986) report were questioned because of doubts about the accuracy of one high-wealth observation.

In public use household survey microdata files (such as used in this paper), amounts are often top coded to prevent disclosure. Also, the amounts are restricted by the size of amounts that could be coded in the survey. Such problems are far less important if the upper tail of the distribution is excluded from the analysis.

4. This was wave 4 of the 1984 panel in this multiwave survey. For detailed information about the organization of the survey, see U.S. Bureau of the Census (1986b).

5. The age of the household reference person is used. For convenience, in this paper that person is referred to as the head.

6. In addition to this technical definition of wealth, at times the term wealth is used in this paper in a broad sense (e.g., when data requirements for the analysis of wealth are discussed).

7. Another paper in this volume, Curtin, Juster, and Morgan (chap. 10), compares distributional estimates from the 1984 SIPP with those from the 1983 SCF and the 1984 Panel Study of Income Dynamics.

8. The inclusion of other asset types in net worth also can affect the age-wealth relation. The 1979 ISDP contained an estimate of the value of consumer durables. Unpublished tabulations from that file showed that moving from a definition of net worth that excluded consumer durables to one that included consumer durables produced small increases in the relative medians for age groups under age forty-five and a small decrease in the relative median for the sixty-five to seventy-four age group.

In a recent paper, Wolff (1987) examined mean wealth by age group for alternative broad definitions of wealth. The most comprehensive definition included pension and social security wealth and human capital.

9. The scale is derived from the 1984 weighted thresholds (U.S. Bureau of the Census 1986a, table A-2). A one-person household (all ages) is used as the base. Each household's income (or, in one estimate, wealth) is divided by the appropriate scale value to obtain adjusted income. The scale values used are as follows: one person (under age sixty-five), 1.023; one person (age sixty-five and over), 0.943; two persons (under age sixty-five), 1.323; two persons (age sixty-five and over), 1.190; three persons, 1.568; four persons, 2.010; five persons, 2.381; six persons, 2.692; seven persons, 3.050; eight persons, 3.403; and nine persons or more, 4.026.

10. The mean amounts of net worth underlying this table (in thousands of dollars) are $26.7 in quintile 1, $45.3 in quintile 2, $70.6 in quintile 3, $99.7 in quintile 4, and $211.4 in quintile 5.

11. If the adjusted amounts are converted to unadjusted amounts, the upper bound of the second net worth quintile is, e.g., $11,090 for an aged one-person household, $13,994 for an aged two-person household, and $23,638 for a four-person household.

12. This pattern is similar to that found by Radner and Vaughan (1984, 1987) using data from the 1979 ISDP.

References

Avery, Robert B., and Gregory E. Elliehausen. 1986. Financial characteristics of high-income families. *Federal Reserve Bulletin* 72, no. 3 (March): 163–77.

Avery, Robert B., Gregory E. Elliehausen, Glenn B. Conner, and Thomas A. Gustafson. 1984a. Survey of Consumer Finances, 1983. *Federal Reserve Bulletin* 70, no. 9 (September): 679–92.

———. 1984b. Survey of Consumer Finances, 1983: A second report. *Federal Reserve Bulletin* 70, no. 12 (December): 857–68.

Beach, Charles M. 1981. *Distribution of income and wealth in Ontario: Theory and evidence*. Ontario Economic Council Research Studies. Toronto: University of Toronto Press.

Cartwright, William S., and Robert B. Friedland. 1985. The President's Commission on Pension Policy household survey, 1979: Net wealth distributions by type and age for the United States. *Review of Income and Wealth*, ser. 31, no. 3 (September): 285–308.

David, Martin. 1959. Welfare, income, and budget needs. *Review of Economics and Statistics* 41 (November): 393–99.

Ferber, Robert. 1966. *The reliability of consumer reports of financial assets and debts*. Studies in Consumer Savings, no. 6. Urbana: Bureau of Economic and Business Research, University of Illinois.

Ferber, Robert, John Forsythe, Harold W. Guthrie, and E. Scott Maynes. 1969. Validation of a national survey of consumer financial characteristics: Savings accounts. *Review of Economics and Statistics* 51 no. 4 (November): 436–44.

Greenwood, Daphne. 1983. An estimation of U.S. family wealth and its distribution from microdata, 1973. *Review of Income and Wealth*, ser. 29, no. 1 (March): 23–44.

———. 1987. Age, income, and household size: Their relation to wealth distribution in the United States. In *International Comparisons of the Distribution of Household Wealth*, ed. Edward N. Wolff. Oxford: Oxford University Press.

Hurd, Michael, and John B. Shoven. 1982. Real income and wealth of the elderly. *American Economic Review* 72 (May): 314–18.

Irelan, Lola M. 1972. Retirement history study: Introduction. *Social Security Bulletin* 35 (November): 3–8.

Irvine, Ian. 1980. The distribution of income and wealth in Canada in a lifecycle framework. *Canadian Journal of Economics* 13 (August): 455–74.

Joint Economic Committee. 1986. The concentration of wealth in the United States (trends in the distribution of wealth among American families). Washington, D.C.: U.S. Congress, July.

Moon, Marilyn. 1977. *The measurement of economic welfare (its application to the aged poor).* Institute for Research on Poverty Monograph Series. New York: Academic Press.

Murray, Janet. 1964. Potential income from assets: Findings of the 1963 Survey of the Aged. *Social Security Bulletin* 27 (December): 3–11.

Nordhaus, William D. 1973. The effects of inflation on the distribution of economic welfare. *Journal of Money, Credit, and Banking* 5:465–504.

Pearl, Robert B., and Matilda Frankel. 1984. Composition of the personal wealth of american households at the start of the eighties. In *The collection and analysis of economic and consumer data: In memory of Robert Ferber,* ed. Seymour Sudman and Mary A. Spaeth. Champaign: Bureau of Economic and Business Research and Survey Research Laboratory, University of Illinois.

Projector, Dorothy S., and Gertrude S. Weiss. 1966. *Survey of financial characteristics of consumers.* Washington, D.C.: Board of Governors of the Federal Reserve System.

_____. 1969. Income–net worth measures of economic welfare. *Social Security Bulletin* 32 (November): 14–17.

Radner, Daniel B. 1975. Discussion. *1975 Proceedings of the American Statistical Association, Business and Economic Statistics Section,* 43–44.

_____. 1984. The wealth and income of aged households. *1984 Proceedings of the American Statistical Association, Social Statistics Section,* 490–95.

Radner, Daniel B., and Denton R. Vaughan. 1984. The joint distribution of wealth and income for age groups, 1979. Office of Research, Statistics, and International Policy Working Papers, no. 33. Washington, D.C.: Social Security Administration, March.

_____. 1987. Wealth, income, and the economic status of aged households. In *International comparisons of the distribution of household wealth,* ed. Edward N. Wolff. Oxford: Oxford University Press.

Schwartz, Marvin. 1983. Trends in personal wealth, 1976–1981. *SOI Bulletin* 3, no. 1 (Summer): 1–26.

Smith, James D. 1974. The concentration of personal wealth in America, 1969. *Review of Income and Wealth,* ser. 20, no. 2 (June): 143–80.

_____. 1987. Recent trends in the distribution of wealth: Data, research problems, and prospects. In *International Comparisons of the Distribution of Household Wealth,* ed. Edward N. Wolff. Oxford: Oxford University Press.

Steuerle, Eugene, and Nelson McClung. 1977. Wealth and the accounting period in the measurement of means. In *The Measure of Poverty.* Technical Paper, no. 6. Washington, D.C.: Department of Health, Education, and Welfare.

Taussig, Michael K. 1973. *Alternative measures of the distribution of economic welfare.* Princeton, N.J.: Industrial Relations Section, Department of Economics, Princeton University.

U.S. Bureau of the Census. 1986a. *Characteristics of the population below the poverty level: 1984.* Current Population Reports, ser. P-60, no. 152 (June). Washington, D.C.: U.S. Government Printing Office.

_____. 1986b. *Household wealth and asset ownership: 1984.* Current Population Reports, ser. P-70, no. 7 (July). Washington, D.C.: U.S. Government Printing Office.

Weisbrod, Burton A., and Lee W. Hansen. 1968. An income–net worth approach to measuring economic welfare. *American Economic Review* 58 (December): 1315–29.

Wolff, Edward N. 1983. The size distribution of household disposable wealth in the United States. *Review of Income and Wealth*, ser. 29, no. 2 (June): 125–46.

———. 1987. The effects of pensions and social security on the distribution of wealth in the U.S. In *International Comparisons of the Distribution of Household Wealth*, ed. Edward N. Wolff. Oxford: Oxford University Press.

Wolfson, Michael C. 1979. Wealth and the distribution of income, Canada, 1969–70. *Review of Income and Wealth*, ser. 25 (June): 129–40.

Comment

Marilyn Moon

Daniel Radner's interesting paper on wealth data offers a number of insights into this difficult-to-measure source of well-being for households and families. Moreover, the abundance of data presented here offers other researchers a valuable source of information. I suspect many people will spend a great deal of time, as I have, perusing the tables and developing their own stories to fit these data.

Radner offers up a number of ways to view the data and carefully guides the reader through some of them. In particular, he focuses attention on relative wealth measures: looking at variations across age groups with age group fifty-five to sixty-four as the base. These numbers offer some interesting insights into comparisons among alternative data sources, between means and medians, and among different components of net worth.

First, Radner uses these ratios to raise some very sobering glimpses at differences in estimates derived from various data bases. Cross-age comparisons are very sensitive to the measure in use. While the patterns of wealth holding remain reasonably constant, the actual dispersion, as well as the overall means, varies greatly. At first glance, it seems possible to pick and choose among data sets to support whatever claim about the age inequality of wealth one wishes to argue.

Second, Radner compares differences in ratios based on the median and the mean value of net worth. As expected, median ratios are less spread out across the distribution for those over age fifty-five but show greater variation for younger families. Radner chooses to use medians rather than means to avoid letting the upper tail of the distribution dominate his analysis. Such a strategy is certainly the more appropriate for comparing "average" families by age group.

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Our conventional wisdom on cross-age differences also seems to be borne out: net worth shows a steady increase up to the age fifty-five to sixty-four category and then declines monotonically after that. But the disaggregation of net worth into its various components adds some additional dimensions to the story. When home equity is excluded, families above the age of sixty-five do better than when the measure is for net worth as a whole. In fact, the sixty-five to sixty-nine-year-olds have the highest median equity holdings of any age group. When only financial assets are considered, older families do even better, exceeding the fifty-five to sixty-four-year-olds in every case. Subtracting unsecured debts from financial assets leaves families under age forty-five with virtually zero median holdings, while those aged seventy-five and over have holdings 25 percent above the fifty-five to sixty-four-year-olds. The very old are largely debt free.

The author devotes much of his time to describing the data sets and the findings, leaving the reader the job of interpretation. Even here, however, he could do more. For example, Radner could discuss what new information the Survey of Income and Program Participation (SIPP) offers that contrasts with other studies. He should also raise the caveats that one must observe in interpreting these results and spend more time on underreporting issues. Is this truly only a problem for those who are well off? If so, and he is interested in those with more modest holdings, then this is not a major problem.

A number of other areas are certainly worthy of further discussion and may serve to breathe more life into some of the numbers. Consider, for example, his table 12.1. While there are many reasons why the different data sets discussed may give varying results, I was struck by how sensible some of these differences seem to be. Mid-life families (aged thirty-five to fifty-four) display the most interesting differences across the various surveys. But this is as it should be. The Pension Commission data, which include pension wealth in net worth, raise substantially the ratio of net worth for the mid-life families.

Also note the findings from the Survey of Financial Characteristics of Consumers (SFCC). The SCFF was taken twenty years earlier than the 1983 Survey of Consumer Finances (SCF) and the SIPP. Wealth was more concentrated in 1962 among older families, and mid-life families had fewer resources than they have in the 1980s.

Do these findings ring true? I would say yes. Improved pension coverage and the rise in the value of housing due to inflation in the 1970s should have resulted in improvements for families still in their prime working years. These effects seem to be borne out by the data. Such intuitive checks of reasonableness are important if we are to have faith in these complicated sets of findings.

Another set of numbers that I find particularly interesting is the quintile net worth figures by age (table 12.12). Here, I was struck by

how unevenly distributed wealth is for older groups as compared to younger ones. Over our lifetimes, a lot of sorting obviously goes on. This particular finding ought to inspire a good deal of future research. It would also be very useful to report the dollar values for the income quintile breaks for each age group to know what to make of these differences. The reader is left with the feeling that just a little more information could tell us a great deal.

I share Radner's strong sense that, although wealth data are historically bad at capturing the numbers for those at the upper tail of the distribution, nonetheless a number of interesting applications are still possible. Indeed, for the very well off, the question seems merely to be, How much do they have? For lower- and middle-income families, on the other hand, wealth may serve as an important adjunct to income for meeting basic consumption needs. But I would have liked to see a more careful discussion of the exact questions that can be reasonably examined within this constraint. The implicit issue raised, I believe, is whether income comparisons across age groups are insufficient and whether, if wealth is included, our views of the relative status of age groups will change. The next step then is to begin to question what we assume people do with their wealth at all ages.

At this point, I feel compelled to quibble with Radner. His basic approach is to contrast income and wealth rather than to try to meld these two very different sources of economic well-being. Combining stocks and flows obviously poses considerable problems. To what extent are dollars of income equivalent to dollars of wealth? Radner recognizes that others have taken different approaches: generally, the decision has been whether to convert stocks into flows or vice versa to make the two sources of well-being consistent. For cross-age group comparisons—the issue of interest here—these two approaches have very different implications. An annuity approach whereby stocks are implicitly converted to flows biases the analysis in favor of higher economic status among the old since net worth is divided across shorter life expectancies. The stock approach, in contrast, favors the young. Families with workers can expect many years of future earnings that can be capitalized. Within age groups, however, either approach will yield meaningful comparisons. But, even across age groups, such comparisons have some validity if we are interested in how well-being is distributed.

Radner approximates this type of approach by looking at wealth quintiles and then at average net worth and financial assets by income quintile. But such measures do not tell us how many people change rank order within age groups. That is, we cannot tell much about how well correlated income and assets are by age group. Such information is particularly interesting to those who wish to discuss how wealth is

used to supplement income in achieving economic well-being. This, I believe, is the inherent question that Radner poses in his paper, and I would, consequently, have liked for him to go into more depth.

The closest Radner comes to addressing this questions is in table 12.17 of the paper. There are some intriguing numbers here as well. Radner considers the ratio of net worth to income by income quintile by age. Here, for the oldest households, the ratios decline in the highest quintile, suggesting that wealth is less concentrated among this age group. In contrast, the ratios of net worth to income for the lowest income quintile of the age fifty-five to sixty-four age group are relatively high. To better understand the implications of these findings, it would again be useful to have the quintile income breaks for each age group rather than having to try to extrapolate from other numbers. That is, the lowest quintile of the age fifty-five to sixty-four age group probably has a much higher dollar cutoff than do those over age sixty-five. If so, this would help explain the high ratio for those at the bottom of the income distribution for this age range. The higher the income of those in the lowest quintile, the more likely is the household to have some net worth.

As usual with an interesting paper, rich in data, the author cannot possibly draw out all findings and inferences. Radner's paper instead gives us all the tools; he has packed his paper with valuable numbers that will undoubtedly remain a crucial reference for many future researchers interested in income and wealth.

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