

Personal Wealth, 1998

by Barry W. Johnson and Lisa M. Schreiber

There were more than 6.5 million individuals in the United States with gross assets of \$625,000 or more in 1998. These “top wealth holders” represented about 3.4 percent of the total U.S. adult population. As a group, top wealth holders owned more than \$11.1 trillion in assets, or almost 32.6 percent of total U.S. personal asset holdings. Almost 4.0 million, or 61.2 percent, of these wealthy individuals were male, and 2.5 million were female. The number of millionaires in the United States grew to more than 2.7 million in 1998.

Background

The distribution and composition of personal wealth in the United States are topics of great interest among researchers and policy planners. Unfortunately, these issues are difficult to research, since there are few sources of data on the wealth holdings of the general population, especially the very rich. Federal estate tax returns (Form 706) provide a unique source from which to study the nation’s wealthiest individuals. The estate tax return contains a complete listing of a decedent’s assets and debts, as well as a demographic profile of the decedent and information on the costs of administering the estate. A decedent’s estate has up to 9 months to file an estate tax return, but use of a 6-month extension is common. It is, therefore, necessary to combine returns filed over a number of calendar years in order to capture data representative of all estate tax decedents dying in a single year.

The estate multiplier technique is used to estimate the wealth of living individuals from Federal estate tax return data. The fundamental assumption underlying this methodology is that estate tax returns filed for decedents who died in a particular year represent a random sample, designated by death, of the living population in that year. Estimates of the wealth holdings of the living population are derived by applying a multiplier, based on appropriate mortality rates, to this sample.

Limitations

While the sample size and richness of available data make this estimation technique attractive, there are limitations to be noted. First, and most important, estate tax returns provide a presumably random sample, stratified by age, not of the total population, but of living persons with gross estates at or above the estate tax filing threshold. Research has proven that “individuals who are economically or socially better off also live longer, on average, and are healthier” [1]. Factors such as access to better health services, better diet and nutrition, fewer risks on the job, and access to better housing seem to contribute to this phenomenon. Therefore, determining a mortality rate appropriate to this sample poses a challenge. It has also been shown that, while estimates of patterns of wealth holding, such as differences in portfolio composition among various age and sex groups, appear quite robust over a variety of reasonable alternate assumptions about the longevity of the very wealthy, overall aggregate estimates are relatively sensitive to the selection of the mortality rates [2]. (See the Appendix to this article for a more complete discussion of the estate multiplier technique.)

Second, while estate tax returns are generally prepared by professionals and are, therefore, likely to be more accurate in detail than survey responses, the values reported are used to compute tax liability; so, there is a natural tendency for the values to be somewhat conservative. This is especially true for hard-to-value assets, such as businesses and certain types of real estate. It should also be noted that the estate tax data used for these estimates are pre-audit figures. A recent Statistics of Income (SOI) study, based on the results of IRS audits of estate tax returns filed in 1992, estimated that detected under valuation of assets was about 1.2 percent of total asset holdings [3]. In addition, it is common to claim substantial minority discounts when valuing ownership interests of less than 50 percent in small companies, partnerships, and other, non-liquid assets [4].

Third, while estate tax returns report assets that are owned outright (what has been called prime wealth), total wealth would ideally include wealth to which a person has an income interest but not necessarily actual title. Examples of the latter include defined-benefit pension plans and Social Security benefits.

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Finally, the wealth of some individuals near death may differ somewhat from that of the general population in the same age cohort. For some, wealth will have been reduced through expenses related to a final illness. For others, effective estate planning will have reduced the value of the estate reportable for tax purposes.

Valuation Measures

The level of wealth to which these estimates apply is \$625,000 or more in gross estate, the Federal estate tax filing threshold in effect for 1998 U.S. decedents. *Gross estate* is a Federal estate tax concept of wealth that does not conform to usual definitions of wealth, primarily because it includes the face value of life insurance in the wealth of the decedent. Therefore, three measures of wealth are used in this article: gross assets (or gross estate), total assets, and net worth.

Gross assets reflects the gross value of all assets, including the full face value of life insurance, reduced by the value of any policy loans, but excluding any reduction for other indebtedness. This measure defines the individuals included in the top wealth-holder group. *Total assets* is a lower wealth value, but is still essentially a gross measure. It differs from gross assets in that the cash, or equity, value of life insurance (i.e., the value of insurance immediately before the policyholder's death) replaces the "at death" value of life insurance included in gross assets [5]. *Total assets* is the valuation concept on which all the analyses in this article are based. *Net worth* is total assets minus debts.

Top Wealth Holders, 1998

In 1998, there were an estimated 6.5 million adults in the U.S., age 18 and older, with gross assets of \$625,000 or more. The combined total assets for this group was more than \$11.1 trillion. By factoring in the \$957.2 billion in debts held by top wealth holders, the resulting combined net worth was almost \$10.2 trillion. Although they accounted for only about 3.4 percent of the U.S. adult population, the net worth of these top wealth holders made up more than 35.2 percent of total U.S. personal net worth in 1998 [6].

Men made up 61.2 percent of the top wealth-holder population in 1998. The estimated 4.0 million men held almost \$7.0 trillion in total assets, making up approximately 62.4 percent of the value of the top wealth holders' asset pool. Almost 1.7 million male top wealth holders were reported to have had a net worth of \$1 million or more. A large majority, 69.5 percent, of male top wealth holders were married, a significantly higher proportion than the 61.7 percent of all adult men in the United States who were married in 1998 (see Figure A). Only 15.0 percent of male top wealth holders were single, as compared to the 26.9 percent of males who were single in the overall U.S. population [7].

There were more than 2.5 million women top wealth holders in 1998. The combined value of their total assets was approximately \$4.2 trillion. Almost 1.1 million of the female top wealth holders had a net worth of \$1 million or more. The distribution of wealthy women, by marital status, was quite different from that of their counterparts in the overall U.S. population. Married women made up 47.0 percent of

Figure A

Top Wealth Holders, 1998: Marital Status, by Sex

Marital status	Male			Female		
	Number of top wealth holders (in thousands)	Percentage of top wealth holders population	Percentage of U.S. population	Number of top wealth holders (in thousands)	Percentage of top wealth holders population	Percentage of U.S. population
	(1)	(2)	(3)	(4)	(5)	(6)
Total	3,997	100.0	100.0	2,533	100.0	100.0
Married.....	2,779	69.5	61.7	1,190	47.0	57.9
Widowed.....	264	6.6	2.7	722	28.5	10.8
Single.....	598	15.0	26.9	351	13.9	20.5
Other ¹	356	8.9	8.8	270	10.7	10.8

¹ Includes individuals who were separated or divorced and those for whom marital status was not determinable.

NOTE: Detail may not add to totals because of rounding.

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all female top wealth holders, while 57.9 percent of all adult women in the U.S. were married in 1998. Likewise, while just 13.9 percent of wealthy women were single, single women made up 20.5 percent of the adult female population. Conversely, widowed women made up 28.5 percent of the female top wealth holders, which is significantly higher than the percentage of women in the United States who were widows in 1998, 10.8 percent.

Portfolio Composition

There were significant differences in portfolio allocation between top wealth holders in 1998 and similar individuals in 1995, the last year for which SOI estimates are available. Overall, 1998 top wealth holders invested more in publicly traded stock and cash and money market accounts than similar individuals in 1995, and they invested less in other financial assets (including Federal, corporate, and tax-exempt bonds, as well as mixed portfolio mutual funds) and investment real estate [8]. Growth in the number of online investment services and increased Internet usage by the general population during the period greatly expanded the accessibility and ease of purchase of stock in publicly held companies; the overall value of these stocks also increased markedly. Both factors could have contributed to the increase in the proportion of stock in the portfolios of wealthy individuals between 1995 and 1998.

Portfolio composition varied substantially by sex and wealth class among America's top wealth holders in 1998. Compared to those in higher net worth groups, individuals with less than \$1 million in net worth devoted a larger percentage of their portfolio to personal residences, investment real estate, and retirement assets. In contrast, top wealth holders with more than \$10 million in net worth, dedicated more of their portfolio to closely held stock than less wealthy investors [9]. Women's portfolios contained a greater proportion of stock in public corporations than those of men, while stock in closely held corporations made up a larger share in the portfolios of male top wealth holders.

Investment real estate, combined with the value of personal residences, dominated the portfolio of men with a net worth less than \$1 million in 1998, accounting for 33.3 percent of total assets. Investments in publicly traded stock made up the second largest share of their portfolio, 15.8 percent, a 71.1-

percent increase over the portfolio share devoted to publicly traded stock by male wealth holders in this wealth class in 1995 (see Figure B). Male top wealth holders with between \$1 million and \$10 million in net worth in 1998 held a significantly different portfolio compared to their 1995 counterparts, as shown by Figure C. Investment real estate was the largest asset for individuals in this wealth bracket in 1995. However, in 1998, publicly traded stock was the dominant asset, accounting for 22.6 percent of the aggregate portfolio. Conversely, the portfolios of male top wealth holders with a net worth of \$10 million or more were allocated similarly in both 1995 and 1998 (see Figure D). In both years, the most dominant assets for men in this net worth category were closely held and publicly traded stocks, although both made up slightly smaller portions of the portfolio in 1998. The largest distinction between the two periods for males in the highest net worth category was the portfolio share held in cash or money market accounts; in 1998, male top wealth holders held more of their portfolio in the form of cash and money market accounts than those in the earlier period.

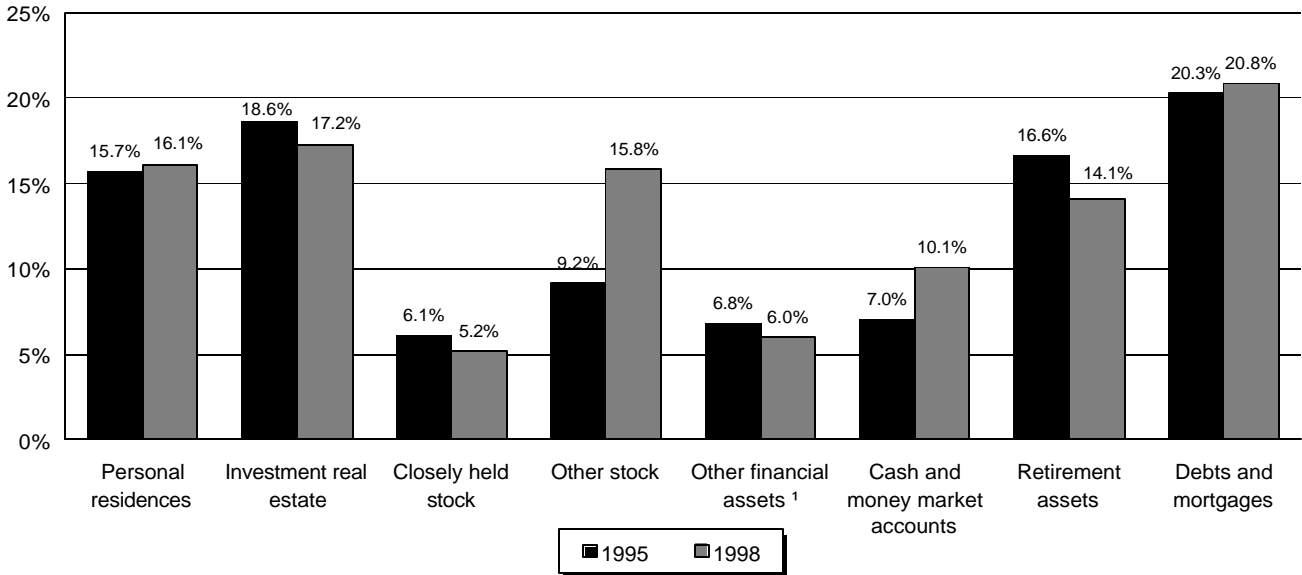
The portfolios held by female top wealth holders in 1998 differed significantly from those of similar women in 1995. Figure E shows that the portfolio of female top wealth holders with a net worth of less than \$1 million in 1998 contained significantly less investment real estate and vastly more publicly traded stock than the portfolio of their 1995 counterparts. A similar difference between the two periods can be observed for female top wealth holders with net worth between \$1 and \$10 million, as publicly traded stock replaced real estate investments (including the value of personal residences) as the major asset in the portfolio for 1998, with stock accounting for 30.7 percent of the total (see Figure F). Figure G shows the dramatic differences between the portfolios of females with a net worth of \$10 million or more in 1995 and 1998. Women in the top wealth bracket in 1998 dedicated 8.0 percent more of their portfolio to publicly traded stock than their 1995 counterparts. Significantly, investments in closely held stock by this wealthiest group of women increased from 13.5 percent of the portfolio in 1995 to 20.2 percent in 1998, reflecting the increasing role of female entrepreneurs in the U.S. economy. In fact, the two most prevalent assets in 1998, publicly traded stock and closely held stock, when combined, composed more

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Figure B

Male Top Wealth Holders with Net Worth of Less Than \$1 Million: Selected Assets and Debts as a Percentage of Total Assets, by Year

Percentage

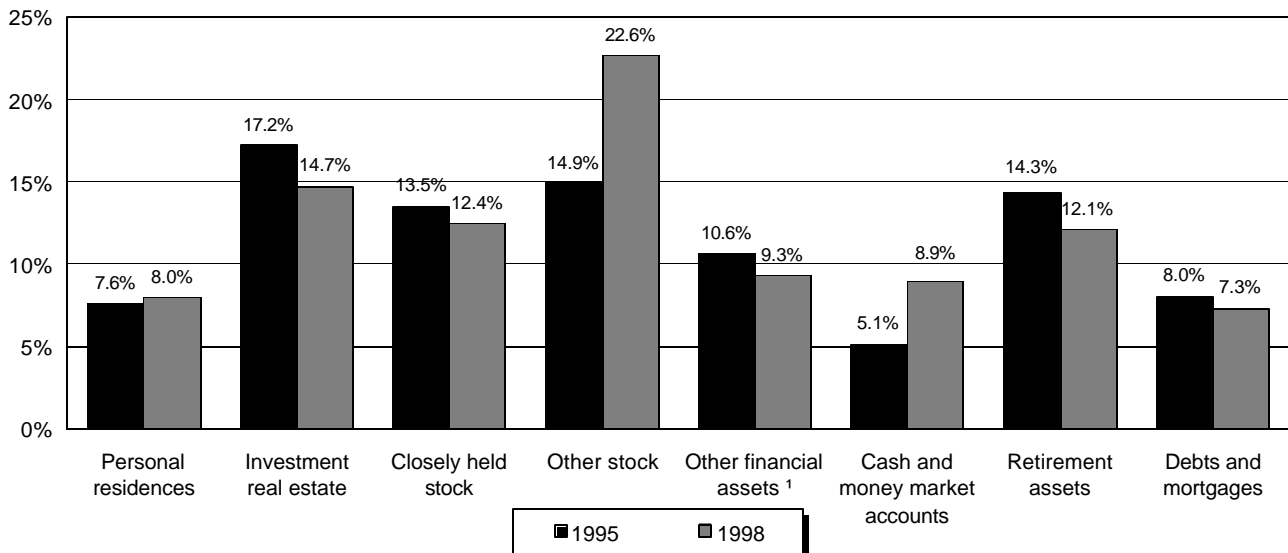


¹ Includes Federal, corporate, and tax-exempt bonds, as well as mixed portfolio mutual funds.

Figure C

Male Top Wealth Holders with Net Worth of Between \$1 Million and \$10 Million: Selected Assets and Debts as a Percentage of Total Assets, by Year

Percentage



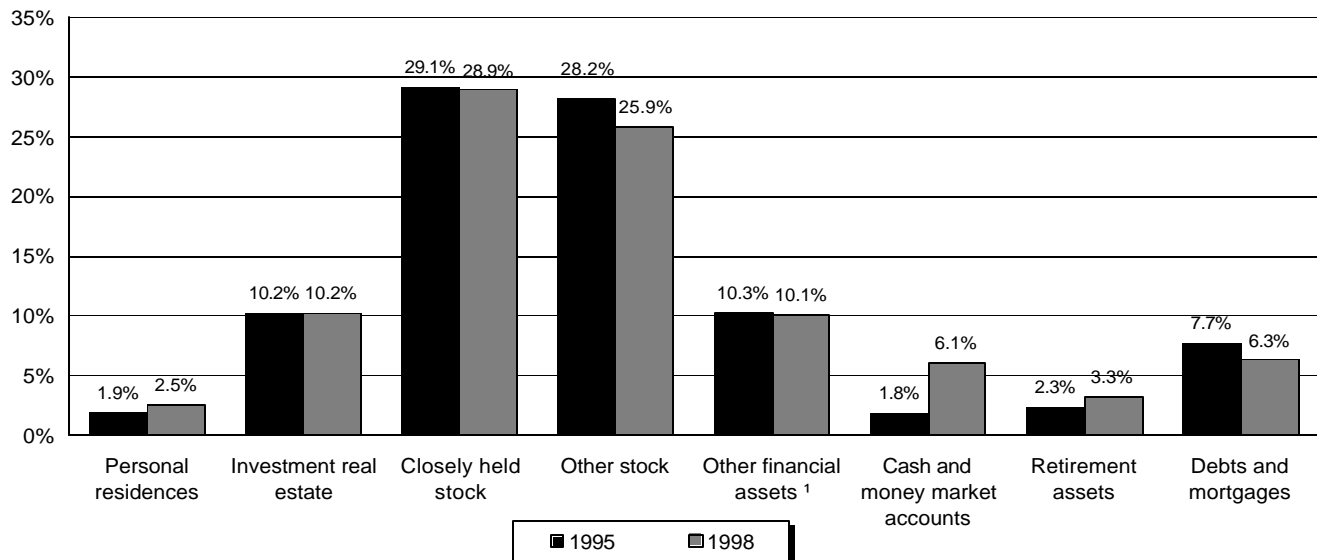
¹ Includes Federal, corporate, and tax-exempt bonds, as well as mixed portfolio mutual funds.

Personal Wealth, 1998

Figure D

Male Top Wealth Holders with Net Worth of \$10 Million or More: Selected Assets and Debts as a Percentage of Total Assets, by Year

Percentage

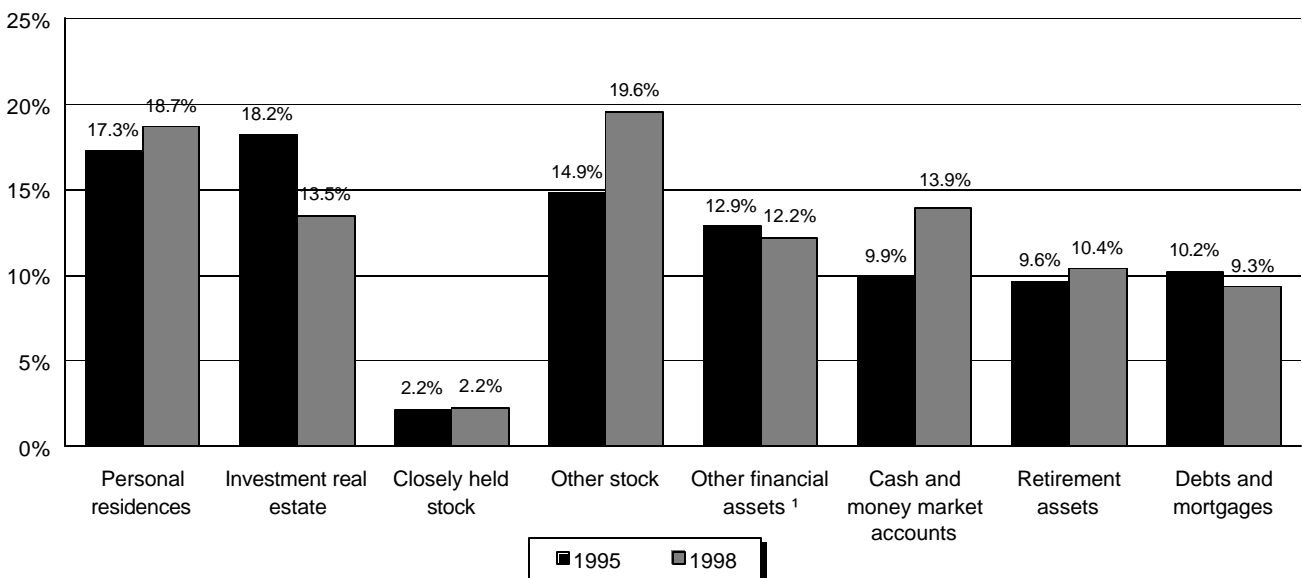


¹ Includes Federal, corporate, and tax-exempt bonds, as well as mixed portfolio mutual funds.

Figure E

Female Top Wealth Holders with Net Worth of Less Than \$1 Million: Selected Assets and Debts as a Percentage of Total Assets, by Year

Percentage



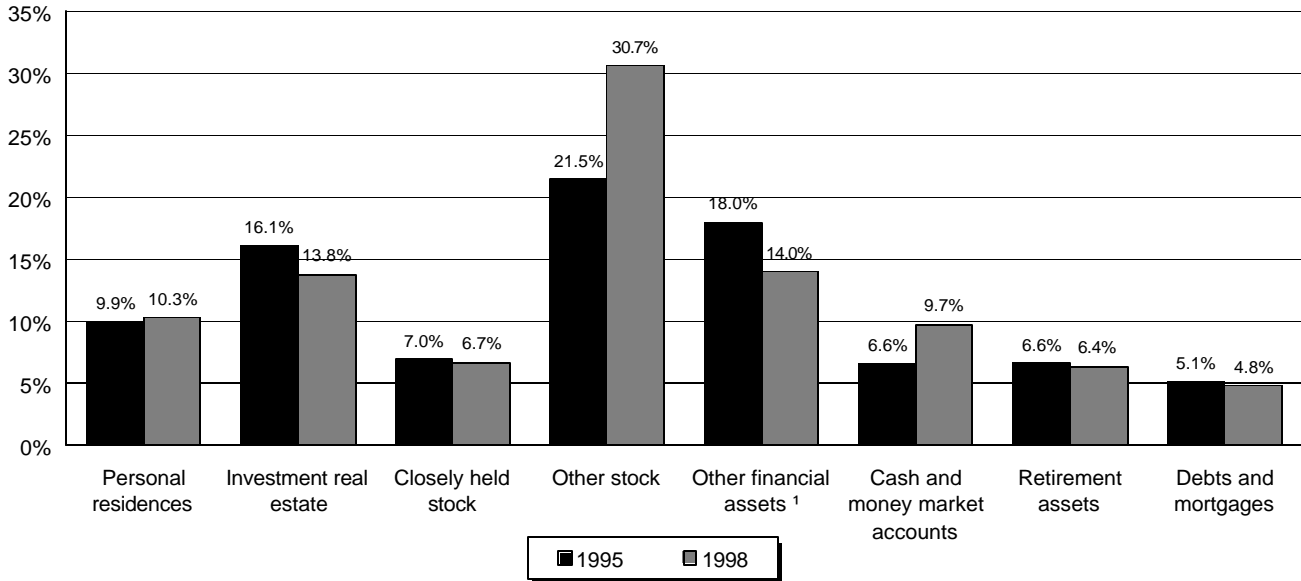
¹ Includes Federal, corporate, and tax-exempt bonds, as well as mixed portfolio mutual funds.

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Figure F

Female Top Wealth Holders with Net Worth of Between \$1 Million and \$10 Million: Selected Assets and Debts as a Percentage of Total Assets, by Year

Percentage

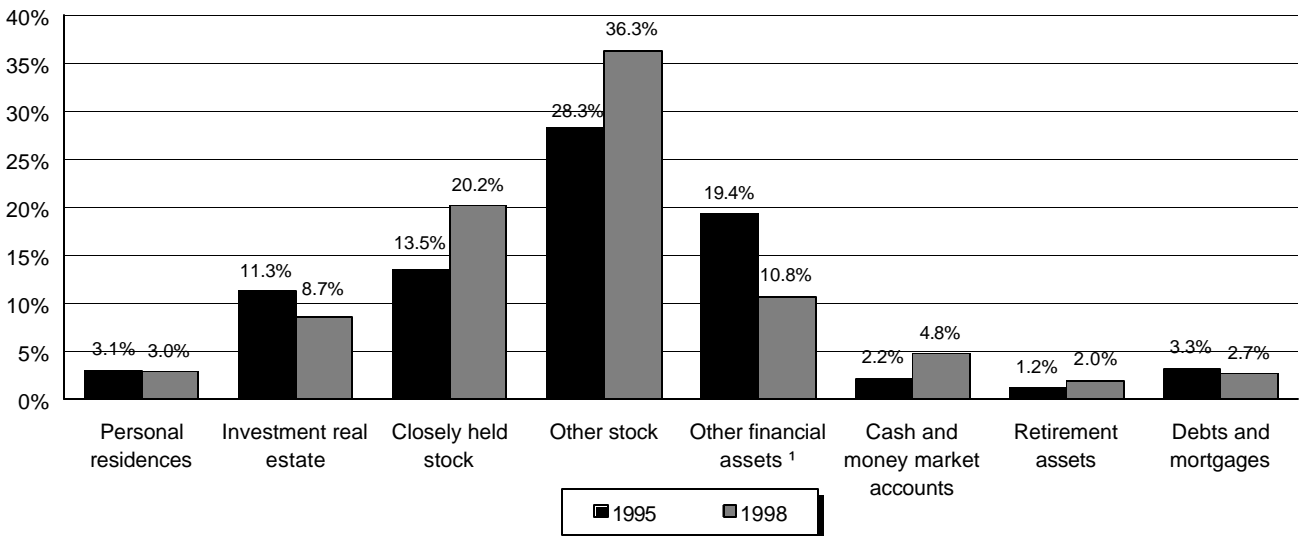


¹ Includes Federal, corporate, and tax-exempt bonds, as well as mixed portfolio mutual funds.

Figure G

Female Top Wealth Holders with Net Worth of \$10 Million or More: Selected Assets and Debts as a Percentage of Total Assets, by Year

Percentage



¹ Includes Federal, corporate, and tax-exempt bonds, as well as mixed portfolio mutual funds.

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than half of the portfolio value for women with \$10 million or more in net worth.

Age

In general, personal investment goals tend to change as one ages. Younger investors are usually interested in asset growth opportunities and are often willing to accept higher levels of risk than older investors, who may be more focused on reliable income sources and who tend to prefer investments that are eligible for preferential income tax treatment. In 1998, the value of investment real estate and investments in closely held corporations made up smaller percentages in the portfolios of older top wealth holders than in portfolios held by younger individuals in the same wealth classes, while the portfolios of younger investors included smaller percentages of Government-issued bonds than those of older investors. Publicly traded stock was the dominant asset in the portfolios of wealth holders in every age group and for both genders in 1998. Figure H shows that, in 1998, men under the age of 50 held almost twice as much of their portfolio in the stock of publicly traded corporations compared to

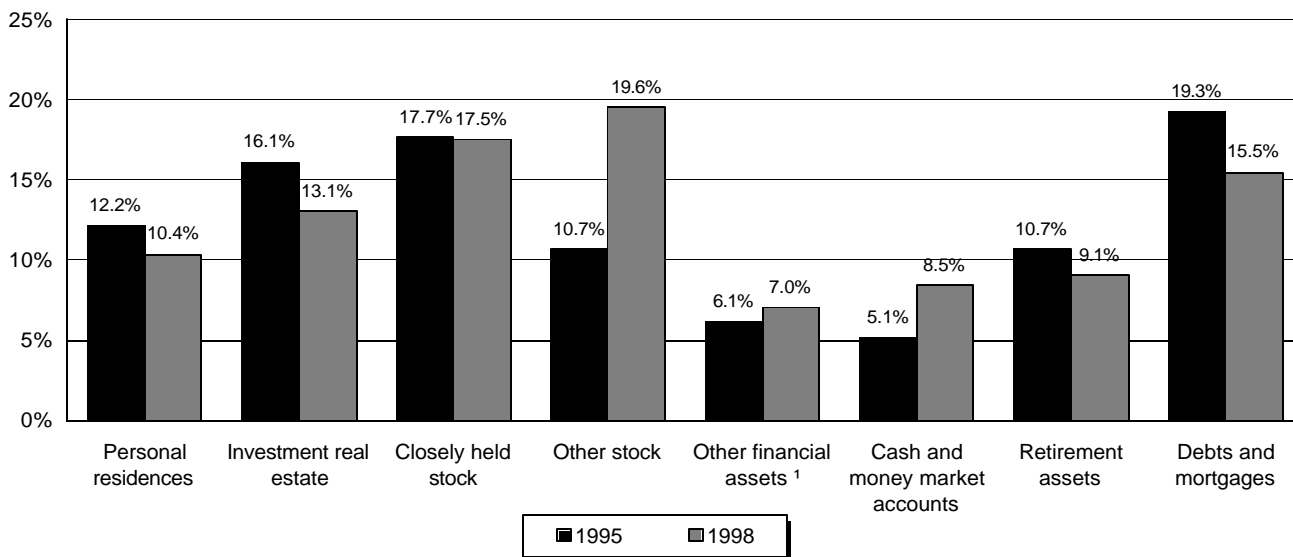
males in this age group in 1995. In 1998, the second most prevalent asset held by these relatively young males was stock in closely held corporations, which made up 17.5 percent of the overall portfolio value. Similarly, while 1995 male top wealth holders between the ages of 50 and 65 had invested predominantly in investment real estate (18.2 percent), publicly traded stocks dominated the portfolio of males in this age bracket in 1998, making up 19.4 percent of the total. For males age 65 and older in both 1995 and 1998, investments in publicly traded stock accounted for the largest share of the portfolio; however, the shares made up of both real estate investments and closely held stock were smaller than for younger males. Figure J illustrates that other financial assets, primarily tax-exempt bonds issued by State and local governments, made up the second largest percentage of the portfolio for male top wealth holders age 65 and older in both 1995 and 1998. These bonds are a low risk, stable source of income that is exempt from Federal, and in some cases State, income tax.

The portfolio of female top wealth holders under the age of 50 held significantly more publicly traded

Figure H

Male Top Wealth Holders under Age 50: Selected Assets and Debts as a Percentage of Total Assets, by Year

Percentage

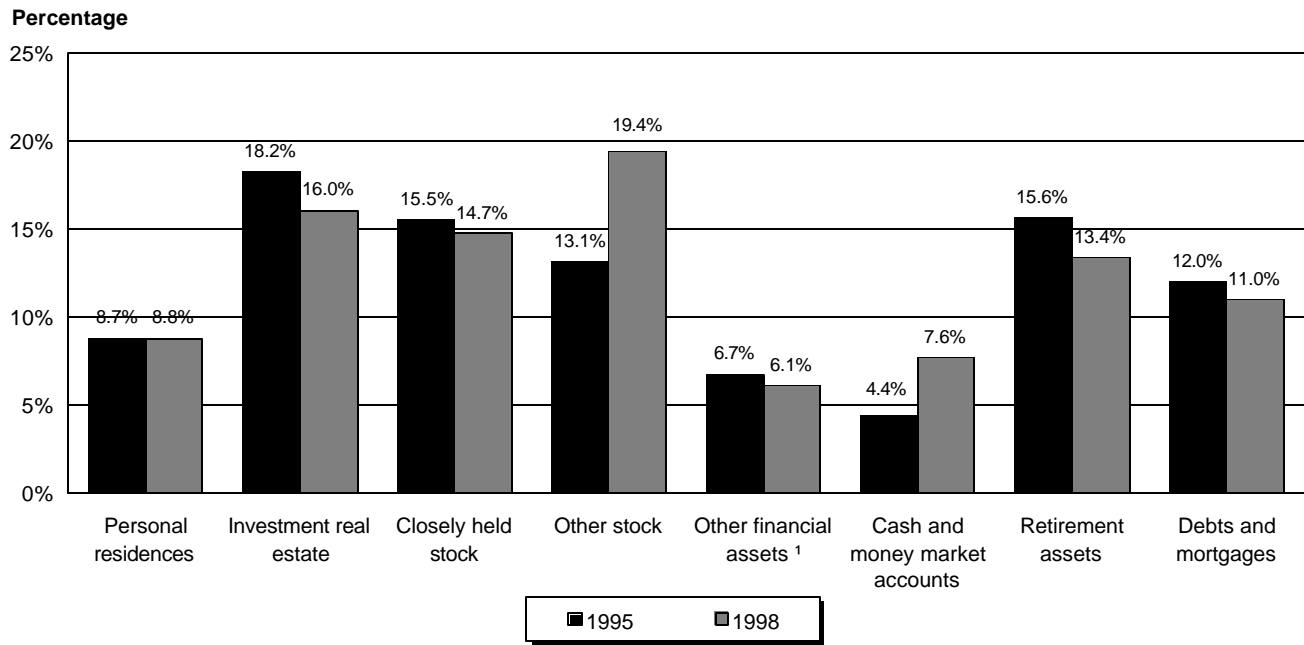


¹ Includes Federal, corporate, and tax-exempt bonds, as well as mixed portfolio mutual funds.

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Figure I

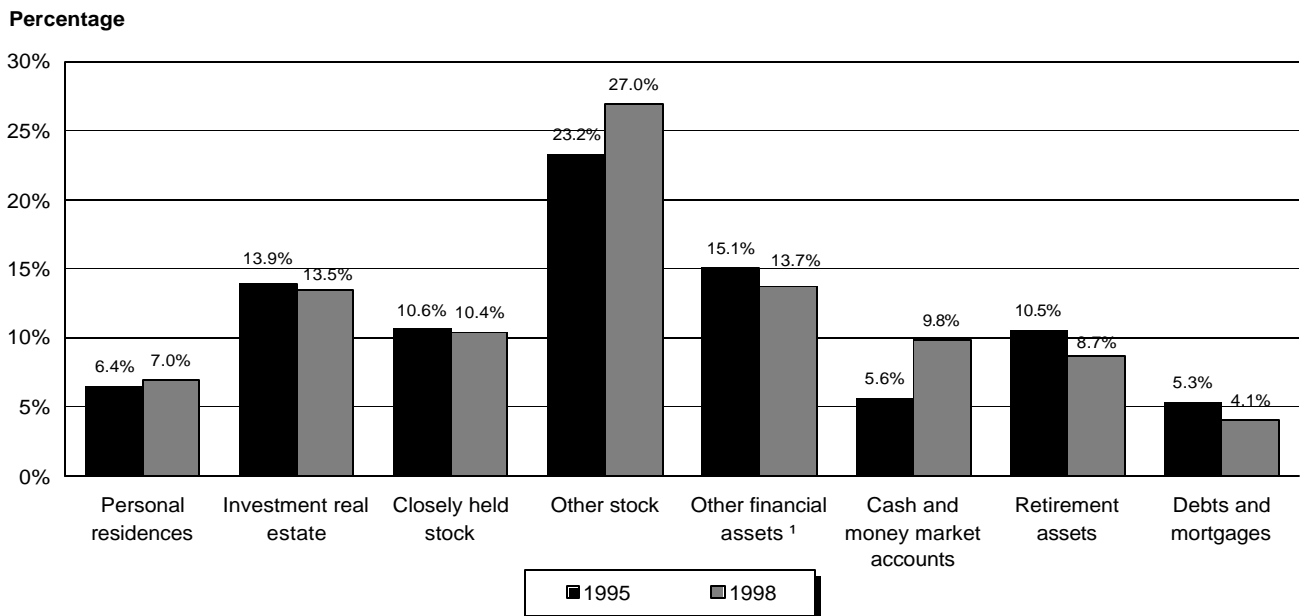
Male Top Wealth Holders Age 50 Under 65: Selected Assets and Debts as a Percentage of Total Assets, by Year



¹ Includes Federal, corporate, and tax-exempt bonds, as well as mixed portfolio mutual funds.

Figure J

Male Top Wealth Holders Age 65 and Older: Selected Assets and Debts as a Percentage of Total Assets, by Year



¹ Includes Federal, corporate, and tax-exempt bonds, as well as mixed portfolio mutual funds.

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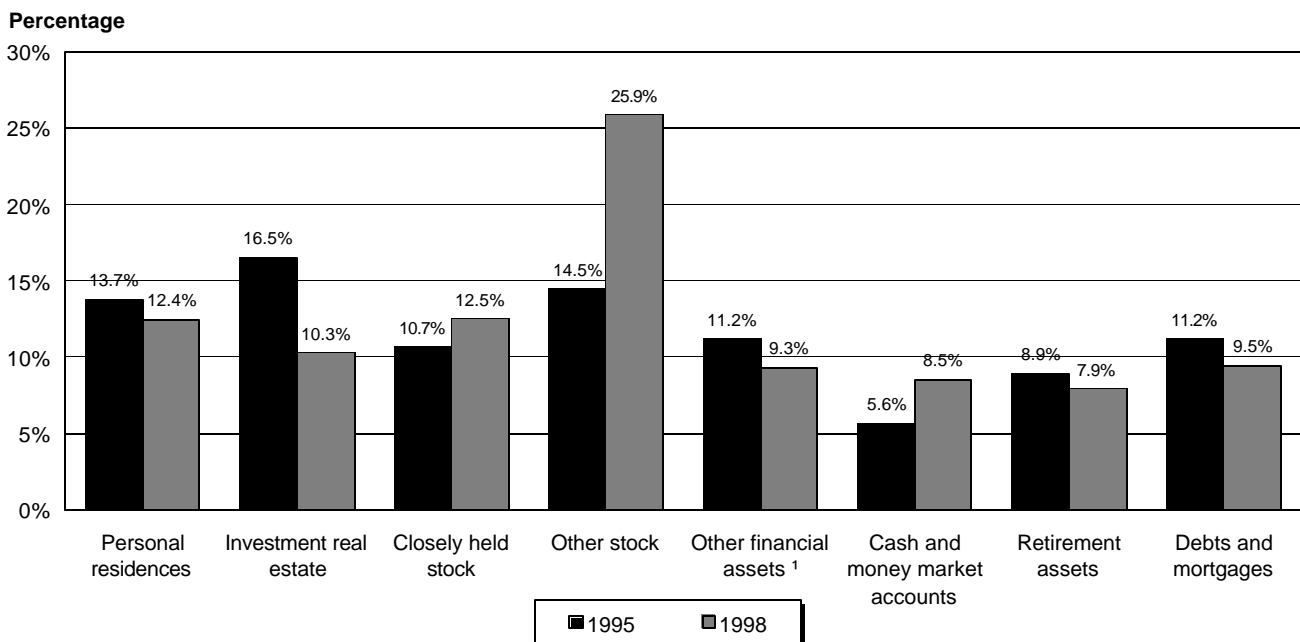
stock in 1998 than in 1995, making publicly traded stock the largest asset in the 1998 portfolio (see Figure K). Closely held stock and personal residences were other major assets in the portfolio held by relatively young women, making up 12.5 percent and 12.4 percent of the total, respectively, in 1998. Likewise, while the dominant portfolio asset in 1995 for women in the 50 under 65 age group was investment real estate, publicly traded stock was the largest portfolio asset in 1998 (see Figure L). Investment real estate ranked second among investment assets, composing 17.2 percent of the portfolio in 1998. Figure M shows that publicly traded stocks made up more than one third of the portfolio of female top wealth holders age 65 and older in 1998, by far the largest share contributed by a single asset type in the portfolios held by men or women in any age bracket. Similar to males over the age of 65, other financial assets, primarily tax-exempt bonds issued by State or local governments, were ranked second in the portfolio, making up 17.6 percent of the portfolio for females in this oldest age group. Investments in closely

held stock accounted for the smallest portfolio share among the assets shown in Figure M.

While there were clear differences in the investment choices made by individuals based on both sex and age, the skewed nature of the distribution of wealth makes it more difficult to discern a similar relationship among sex, age, and an individual's overall level of wealth. Some economic theory predicts that individuals save over their working lifetime and then consume out of those savings after retirement [10]. There are a number of refinements to this theory that suggest the very wealthy may have a number of additional motivations for saving, such as the desire to provide bequests at death, which might mean that wealth accumulation could continue well beyond retirement age. Figure N shows that average net worth clearly increased with age for male top wealth holders. Men under the age of 50 had an average net worth of almost \$1.2 million, while the average for males age 85 and older was nearly \$2.5 million, more than double that of the youngest group. For highly skewed distributions, however, the median

Figure K

Female Top Wealth Holders Under Age 50: Selected Assets and Debts as a Percentage of Total Assets, by Year

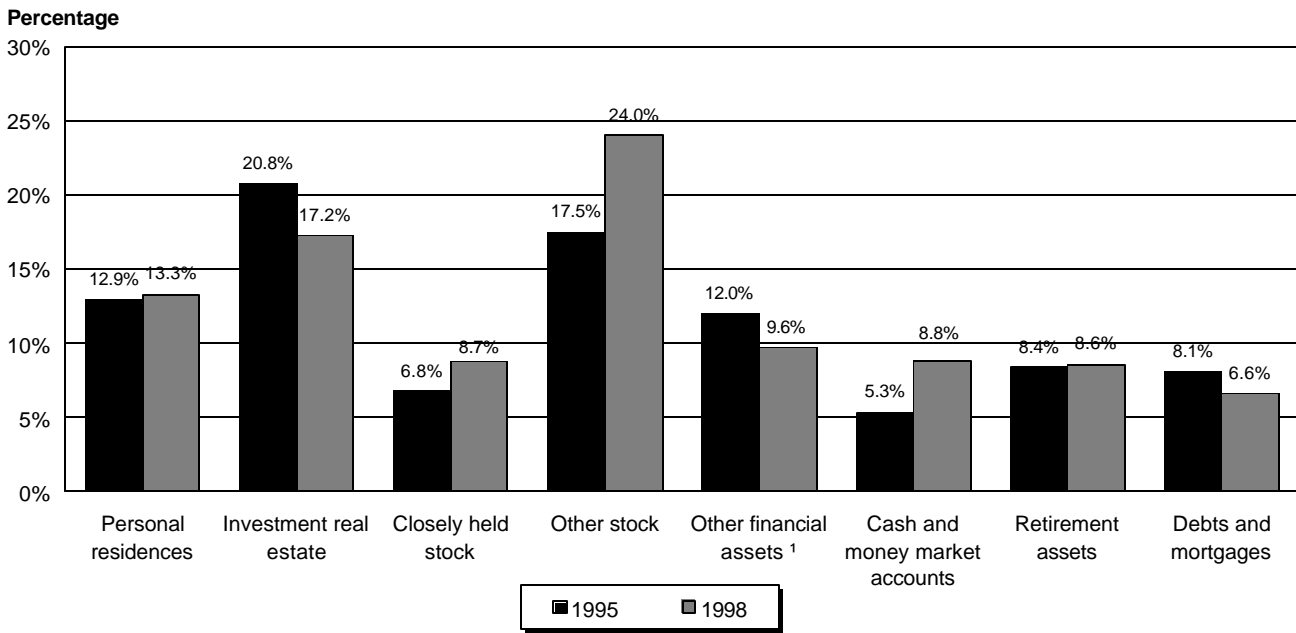


¹ Includes Federal, corporate, and tax-exempt bonds, as well as mixed portfolio mutual funds.

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Figure L

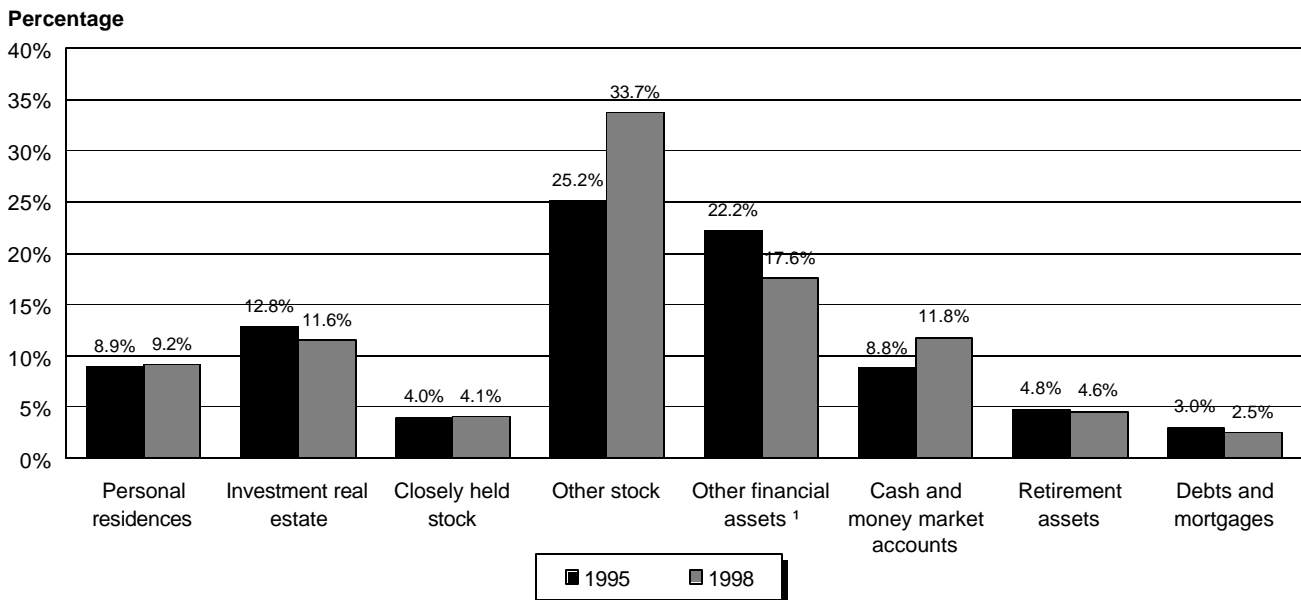
Female Top Wealth Holders Age 50 Under 65: Selected Assets and Debts as a Percentage of Total Assets, by Year



¹ Includes Federal, corporate, and tax-exempt bonds, as well as mixed portfolio mutual funds.

Figure M

Female Top Wealth Holders Age 65 and Older: Selected Assets and Debts as a Percentage of Total Assets, by Year



¹ Includes Federal, corporate, and tax-exempt bonds, as well as mixed portfolio mutual funds.

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is often a much better summary measure than the average since the median is less affected by large outliers in a population. For young, wealthy males, the median net worth was \$654,800. Figure N shows that, while the median value of net worth was higher for males age 50 and older, the median was about the same for men in each of the over 50 age groups depicted in the graph, approximately \$1.0 million.

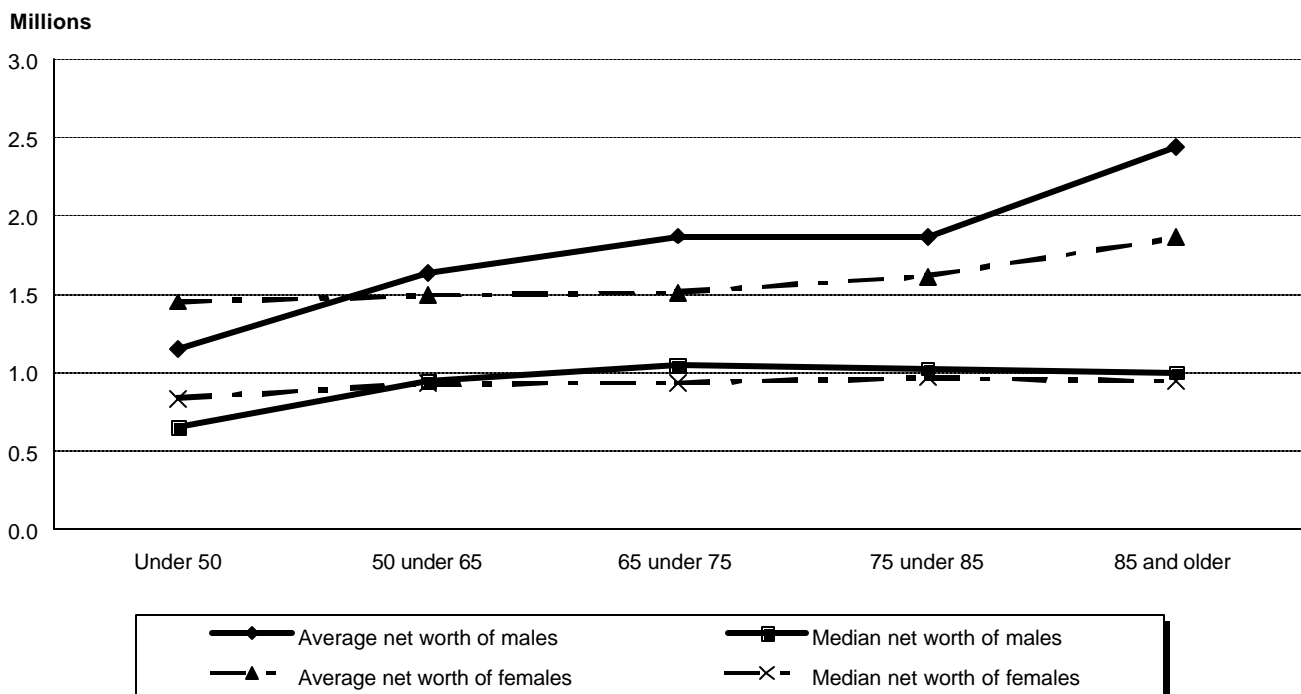
The average net worth for females under the age of 50 was almost \$1.5 million, higher than that of males in the same age group. Unlike their male counterparts, however, the average was nearly the same for females in both the 50 under 65 and 65 under 75 age groups. For women over age 75, average net worth was higher, more than \$1.6 million for women in the 75 under 85 age group and almost \$1.9 million for women age 85 and older. The median value of net worth for women, however, was almost the same for all age groups. For women under the age of 50, the median was \$835,400. For all other age groups, the median was approximately \$950,000.

StateData

Figure O details the States with the largest numbers of resident millionaires [11]. California, the most populous State in America in 1998, had the largest number of residents with a net worth of \$1 million or more, 412,000 millionaires [12]. New York and Florida had the second and third largest number of resident millionaires, 243,000 and 206,000, respectively. Overall, the number of millionaires in most States in 1998 was almost double that recorded in 1995, despite substantially smaller changes in the overall adult population and in inflation, which was only about 7.0 percent for the 3-year period [13]. For example, the number of California residents with a net worth of \$1 million or more increased 80.7 percent, having numbered 228,000 in 1995, while the State adult population increased by 4.2 percent between 1995 and 1998. Similarly, the number of resident millionaires in Texas grew dramatically from 76,000 in 1995 to 157,000 in 1998 despite an increase in the State adult population of only 6.1 percent. Massachusetts' adult population increased by only

Figure N

All Top Wealth Holders: Average and Median Net Worth, by Sex and Age, 1998



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Figure O

States with the Largest Number or Highest Concentration of Resident Millionaires, 1998 ¹

[Numbers are in thousands]

State	Number of millionaires	Total State population	Millionaires as a percentage of State population
	(1)	(2)	(3)
California.....	412	23,756	1.7
New York.....	243	13,673	1.8
Florida.....	206	11,376	1.8
Texas.....	156	14,131	1.1
Illinois.....	146	8,857	1.6
Pennsylvania.....	122	9,141	1.3
New Jersey.....	116	6,125	1.9
Ohio.....	85	8,365	1.0
Massachusetts.....	81	4,690	1.7
Connecticut.....	65	2,484	2.6
Colorado.....	56	2,930	1.9
District of Columbia.....	8	420	1.9

¹ Millionaires are defined as individuals with net worth of \$1 million or more.

1.0 percent from 1995 to 1998; yet the number of residents with \$1 million or more of net worth increased by 125.0 percent.

Looking at the number of millionaires on a per capita basis, that is, the number of millionaires per thousand residents, eliminates the distortions caused

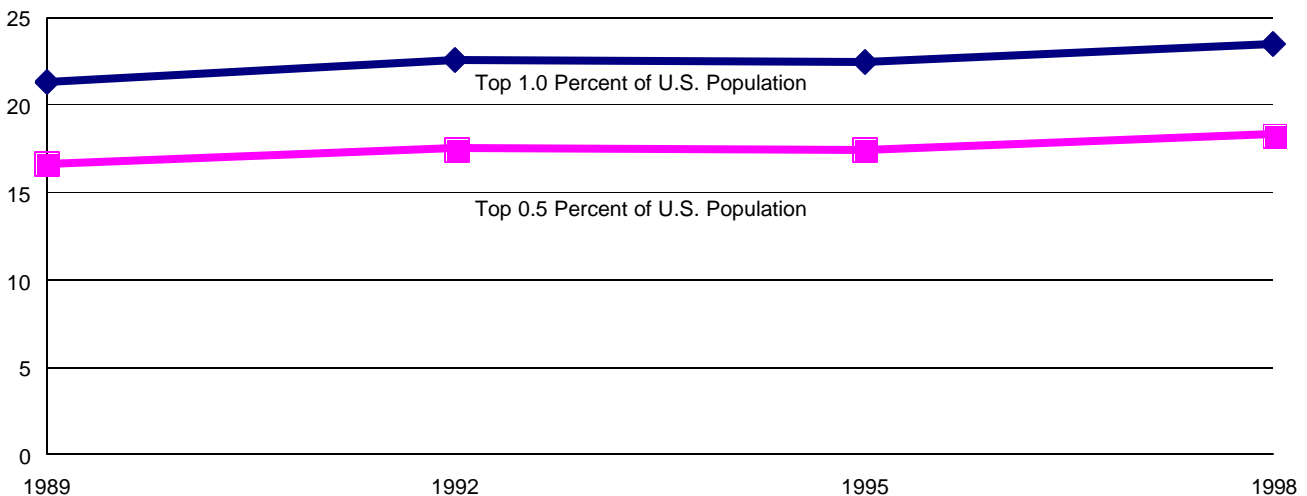
by the large adult populations in some States and, thereby, presents a somewhat different picture of the geographic distribution of wealth in the United States. Connecticut, ranked the 27th largest state by size of population, had the greatest concentration of millionaires, with more than 2.6 percent of the residents having \$1 million or more in net worth. With an approximate population of 2.9 million and 56,000 residents with a net worth of \$1 million or more, Colorado had the second highest density of millionaires, 1.9 percent. The District of Columbia, with a population of 420,000, was ranked third with about 1,900 millionaires per 100,000 residents. The States with the largest number of millionaires--Florida, New York, and California--were fifth, seventh, and eighth, respectively, in the per capita ranking.

Concentration Estimates

The distribution of wealth in the United States is highly skewed, with a relatively small group of individuals owning a large percentage of the total net worth. Longitudinal changes in distribution of wealth in the U.S. can be observed by examining the share of U.S. wealth, measured in terms of net worth, held by a constant percentage of the population. Figure P reports the percentages of total U.S. wealth held by

Figure P

Percentage of Total U.S. Net Worth Held by the Top 1.0 Percent and Top 0.5 Percent of the U.S. Population, 1989-1998



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the top 1.0 percent and the top 0.5 percent of the population, 1989-1998 [14, 15]. In 1998, 1.0 percent of the U.S. adult population corresponded with 1.9 million individuals. These individuals owned approximately 23.5 percent of total U.S. individual wealth, a 1.0-percent increase over the share owned by this subpopulation in 1995 and a 2.0-percent increase since 1989, when the top 1.0 percent of the population owned more than 21.3 percent of U.S. wealth. A similar pattern was evident in the share of wealth held by the 963,000 individuals who made up the top 0.5 percent of the U.S. adult population in 1998. They held about 18.3 percent of the Nation's net worth in 1998, up from about 17.4 percent in 1995 and 16.6 percent in 1989. These slight changes in the concentration may indicate that the real wealth of the Nation's top wealth holders grew at a slightly higher rate than that of the overall adult population. However, the sampling error associated with these estimates is large, meaning that most of the inter-period differences may not be statistically significant.

Summary

There were more than 6.5 million individuals in the United States with gross assets of \$625,000 or more in 1998. These individuals represented about 3.4 percent of the total U.S. adult population. As a group, top wealth holders owned more than \$11.1 trillion in total assets, or 32.6 percent of total U.S. personal asset holdings. Almost 4.0 million, or 61.2 percent, of these wealthy individuals were male, and 2.5 million were female. This strongly contrasted with the gender distribution of the total U.S. population in 1998, which contained only 48.0 percent men. Male top wealth holders were more likely to be married than men in the overall U.S. population, while the opposite was true for female top wealth holders, who were less likely to be married than their counterparts in the U.S. population.

Both the age and relative wealth of top wealth holders impacted the composition of their portfolios. Women's portfolios contained a greater proportion of stock in public corporations than those of men. The value of the personal residence and investments in closely held corporations made up smaller percentages in the portfolios of older top wealth holders than in portfolios held by younger individuals in the same wealth classes. Individuals with \$1 million or less in

net worth devoted a larger percentage of their portfolio to personal residences, investment real estate, and retirement assets than those in higher net worth groups. Top wealth holders with more than \$10 million in net worth dedicated more of their portfolio to closely held stock in 1998 than less wealthy investors. Overall, 1998 top wealth holders invested in more publicly traded stock and cash and money market accounts than similar individuals in 1995, and they invested less in other financial assets (including Federal, corporate, and tax-exempt bonds, as well as mixed portfolio mutual funds) and investment real estate.

There was a significant increase in the number of U.S. citizens with net worth of \$1.0 million or more between 1995 and 1998. Overall, the number of millionaires per State in 1998 was almost double that recorded in 1995 despite substantially smaller changes in State adult populations and low inflation over the 3-year period. California remained the State with the largest number of millionaires, while Connecticut was the State with the greatest per capita concentration of millionaires. Estimates of the amount of wealth held by the top 1.0 percent and 0.5 percent of the U.S. population suggest that the percentage of overall U.S. wealth held by these groups increased slightly between 1995 and 1998.

Appendix: The Estate Multiplier Technique

The estate multiplier technique assumes that estate tax returns, taken as a whole, represent a random sample of the living wealthy population and thus provide a means of producing reasonable estimates of personal wealth. The multiplier is equivalent to a sampling weight where the probabilities of selection include the probability of being a decedent and also that of being included in the Statistics of Income sample of estate tax returns. The more difficult computation is determining the probability of being a decedent. Mortality rates for the general population, by age and sex, available from the National Center for Health Statistics, provide the basis for the estimates. However, there is much evidence that the wealthy have mortality rates significantly lower than those of the entire population. The following sections describe the sampling criteria used to select the underlying estate tax returns, as well as efforts to develop mortality rates appropriate for this elite segment of the population.

Estate Tax Return Sample Design

The Statistics of Income Division collects data from an annual sample of Federal estate tax returns that are used primarily for policy and budget purposes. The sample follows a 3-year cycle that is designed mainly to accommodate year-of-death estimates, with each study concentrating on decedents who died in the first year, the focus year, of the 3-year cycle. The annual samples are also adequate for producing filing-year estimates. Year-of-death estimates are desirable, because filing extensions and other filing delays mean that returns filed in any given calendar year may represent decedents who died in many different years. Thus, estate tax return data for a single filing year may reflect different economic and tax law conditions. By concentrating on a single year of death, these limitations can be overcome, making it possible to study the data in the context of a single time period.

Returns are selected using a stratified random sample with three stratifying variables. Since 1982, the stratifying variables have been year of death (focus year versus non-focus years), total gross estate, and age at death. Gross estate is divided into five categories: \$625,000 under \$1 million, \$1 million under \$2.5 million, \$2.5 million under \$5 million, \$5 million under \$10 million, and \$10 million or more. Age at death is divided into five categories: under 40, 40 under 50, 50 under 65, 65 under 75, and 75 and older. Sample rates vary from 3 percent to 100 percent, with over half the strata selected with certainty, i.e., at the 100-percent rate.

SOI has combined Federal estate tax returns filed over 3-year periods to produce the estimates of wealth for 1998 presented here. One of the strengths of the estate multiplier technique is the large sample on which the estimates are based. The 1998 sample includes more than 26,000 returns [16].

Mortality Differentials

Research has proven that individuals who are economically or socially better off generally live longer and are healthier than individuals in the general population. Therefore, it is important to determine a mortality rate appropriate to the wealthy decedents in the estate tax return sample. If mortality and wealth are correlated, then biased estimates will result using mortality rates unadjusted for wealth level. Evidence suggests that there is an inverse relationship between

these factors, meaning that unadjusted multipliers would be too low and, thus, undervalue wealth [17].

There have been a considerable number of attempts to quantify differences between the mortality of the general population and that of the very wealthy, looking at factors such as education, income, and occupation. For the data presented in this article, the National Longitudinal Mortality Study (NLMS), produced by the National Institutes of Health, was used to estimate the magnitude of this difference, hereafter called the "mortality differential" [18]. The NLMS is a random sample of 1.3 million Americans of all ages, races, and sexes, in the civilian, non-institutionalized population. The sample was drawn mainly from the Census Bureau's Current Population Survey. Interviews, done by telephone, achieved a 96-percent response rate. Respondents were at least 14 years of age.

Because the NLMS did not contain information on a respondent's wealth, income and occupation were used to identify survey respondents with characteristics similar to estate tax decedents. Mortality rates, by age and sex, were calculated for NLMS decedents whose incomes and occupations were similar to the incomes and occupations of estate tax decedents. Mortality rates, by age and sex, were also calculated for all individuals in the NLMS sample. A simple ratio of these two rates was used to construct mortality differentials. National mortality rates, published by the National Center for Health Statistics, were then multiplied by the differentials to obtain mortality rates appropriate for wealthy decedents [19].

The differences between the mortality rates of the general population and those of individuals with characteristics similar to the estate tax decedent population, captured in the magnitude of the mortality rate differentials, were most pronounced for young decedents; these differences disappeared entirely by age 85. For example, the mortality rate for a wealthy male under the age of 40 was about half that of a male in the general population. However, for males over 85 years of age, the mortality rates were the same for both groups. Wealth seems to have had a much smaller effect on the mortality rates of females in the NLMS sample than it had on the mortality of males in that sample. The mortality rate for wealthy females under age 40 was approximately 89.0 percent of that for females in the general population.

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For females over 85 years of age, the mortality rates were the same for both groups.

Multipliers

The multipliers (or sample weights) were calculated as follows:

$MULT = 1 / (p \cdot r \cdot d)$ where:

p = probability of selection to the estate tax sample,

r = mortality rate,

d = rate differential.

The multipliers ranged from 2 to 18,000, with an average of about 250. Some additional smoothing of the multipliers was employed to constrain both tails of the net worth distribution [20].

Notes and References

- [1] See Menchik, Paul (1991), "Economic Status as a Determinant of Mortality Among Nonwhite and White Older Males: or, Does Poverty Kill?," Institute for Research on Poverty, Discussion Paper Number 93891.
- [2] Scheuren, Fritz (1994), "Historical Perspectives on IRS Wealth Estimates With a View to Improvements," *Compendium of Federal Estate Tax Data and Personal Wealth Studies*, Department of the Treasury, IRS Publication 1773, p. 358.
- [3] Eller, Martha Britton (2001), "Audit Revaluation of Federal Estate Tax Returns," *Internal Revenue Service Statistics of Income Bulletin*, Winter 2000-2001, Washington, DC.
- [4] Wherever possible, the value of minority discounts was added back to the individual asset values used in these estimates. However, inconsistencies in the way that these discounts are reported on Form 706 limit SOI's ability to collect these data. Therefore, it is likely that the estimates presented here are still somewhat undervalued.
- [5] Estimates of the equity value of life insurance included in total assets were approximated, based on the face value reported on Federal estate tax returns and on the decedent's age. A ratio of the equity value to the face value was developed, using data from wealthy respondents to the 1989, 1992, and 1995 Board of Governors of the Federal Reserve System's Surveys of Consumer Finances (SCF). A simple regression was used to predict the values used in the Statistics of Income estimates. The same set of ratios was used for both males and females, due to a lack of sex-specific data in the SCF.
- [6] Estimates of both the total assets and net worth of the United States are from household estimates derived from the Board of Governors of the Federal Reserve System's Survey of Consumer Finances (SCF), found in Kennickell, Arthur, B. (2000), "An Examination of Changes in the Distribution of Wealth from 1989 to 1998: Evidence from the Survey of Consumer Finances," Board of Governors of the Federal Reserve System working paper, p. 19.
- [7] Marital status estimates for the general population, by sex, were obtained from the U.S. Census Bureau, *Current Population Reports*, pp. 20-514.
- [8] Estimates of personal wealth for 1995 can be found in Johnson, Barry W., "Personal Wealth 1995," *Internal Revenue Service Statistics of Income Bulletin*, Winter 1999-2000, Washington, DC pp. 59-84.
- [9] Closely held stock is stock in a corporation that is not publicly traded, usually that of a small, family-owned corporation.
- [10] See Modigliani, Franko (1986), "Life Cycle, Individual Thrift, and the Wealth of Nations," *American Economic Review*, Vol. 68, pp. 547-560.
- [11] While the size of the underlying sample of estate tax returns makes estimates of wealth, derived using the estate multiplier technique, fairly robust, estimates of wealth by State can be subject to significant year-to-year fluctuations for States with relatively small decedent populations. This is especially true for individuals at the extreme tail of the net worth distribution. For this reason, Table 6 is limited to individuals with net worth of \$20 million or less.
- [12] U.S. population data obtained from the U.S. Bureau of the Census (1999), "Population Estimates for the U.S., Regions, Divisions, and

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States by 5-year Age Groups and Sex: Annual Time Series Estimates, July 1, 1990 to July 1, 1998.”

- [13] Consumer Price Index (2002), U.S. City Average for All Items, U.S. Department of Labor, Bureau of Labor Statistics, Washington, D.C.
- [14] Estimates of the U.S. adult population obtained from U.S. Bureau of the Census, press release CB96-88, also published in U.S. Bureau of the Census, *Statistical Abstract of the United States: 2000 (120th edition*, Washington, DC, Table 13.
- [15] For estimates of U.S. net worth for 1989, 1992, 1995 and 1998, see Kennickell, Arthur, B., pp. 16-19.
- [16] Although the overall sample of estate tax returns is large, the number of decedents who were young (less than 40) or extremely wealthy (gross assets of \$5 million or more) in any given year varies considerably and is small in comparison to their number in the living population. Because of this, the resulting estimates of wealth for these two categories of living individuals would be subject to significant fluctuations from period to period. To reduce this variance, the sample is “smoothed” by including *all* returns for young or wealthy decedents filed during the 3-year sample period without regard to the decedent's year of death.

These segments of the sample are then post-stratified and reweighted to represent the true decedent population for the year of interest. This technique reduces the effect of outliers on estimates of personal wealth.

- [17] Smith, James (1994), “Estimating the Wealth of Top Wealth-Holders from Estate Tax Returns,” *Compendium of Federal Estate Tax Data and Personal Wealth Studies*, Department of Treasury, IRS Publication 1773, p. 336.
 - [18] A more detailed description of this study is found in *A Mortality Study of 1.3. Million Persons by Demographic, Social, and Economic Factors: 1979-1985 Follow-up 1992 (1992)*, U.S. National Longitudinal Mortality Study, National Institutes of Health, National Heart, Lung, and Blood Institute, NIH Publication Number 92-3297.
 - [19] Mortality data for 1998 were obtained from the National Center for Health Statistics, Division of Vital Statistics as reported in the *National Vital Statistics Reports*, Volume 48, Number 11, July 24, 2000.
 - [20] For a more complete methodological discussion, see Johnson, Barry W., “Updating Techniques for Estimating Wealth from Federal Estate Tax Returns,” *1997 Proceedings of the American Statistical Association, Section on Business and Economic Statistics*.
- SOURCE: IRS, Statistics of Income Bulletin, Winter 2002-2003, Publication 1136 (Rev. 4-2003).

Personal Wealth, 1998

Table 1.--Personal Wealth, 1998: Type of Property by Size of Net Worth

[All figures are estimates based on samples--numbers are in thousands, money amounts are in millions of dollars]

Size of net worth	Total assets		Debts and mortgages		Net worth		Personal residence	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Total.....	6,530	11,142,788	5,020	957,211	6,530	10,185,577	4,771	1,080,043
Size of net worth:								
Negative net worth.....	39	36,353	39	90,087	39	-53,734	22	4,932
\$1 under \$600,000.....	1,253	671,387	1,105	195,383	1,253	476,004	964	158,492
\$600,000 under \$1,000,000.....	2,494	2,110,572	1,784	172,173	2,494	1,938,399	1,764	319,302
\$1,000,000 under \$2,500,000.....	2,058	3,289,005	1,529	222,324	2,058	3,066,681	1,508	351,952
\$2,500,000 under \$5,000,000.....	440	1,569,754	357	89,762	440	1,479,991	325	119,490
\$5,000,000 under \$10,000,000.....	166	1,196,100	138	70,470	166	1,125,630	126	65,479
\$10,000,000 under \$20,000,000.....	51	742,956	42	39,731	51	703,225	38	31,886
\$20,000,000 or more.....	29	1,526,661	25	77,280	29	1,449,381	23	28,510
Size of net worth	Investment real estate		Closely held stock		Other stocks		State and local bonds	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Total.....	3,843	1,531,767	1,287	1,325,080	4,854	2,709,434	2,073	633,108
Size of net worth:								
Negative net worth.....	24	15,059	8	3,087	13	1,120	--	--
\$1 under \$600,000.....	578	116,607	200	31,493	748	68,421	102	3,178
\$600,000 under \$1,000,000.....	1,396	311,718	316	79,012	1,847	419,137	760	85,986
\$1,000,000 under \$2,500,000.....	1,331	484,712	472	236,900	1,650	785,808	843	176,180
\$2,500,000 under \$5,000,000.....	325	231,284	167	182,806	377	420,944	225	110,273
\$5,000,000 under \$10,000,000.....	122	152,351	78	198,902	147	350,633	95	92,840
\$10,000,000 under \$20,000,000.....	40	85,883	27	138,892	44	213,119	30	64,786
\$20,000,000 or more.....	25	134,154	20	453,989	27	450,253	18	99,866
Size of net worth	Federal savings bonds		Other Federal bonds		Corporate and foreign bonds		Bond funds	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
Total.....	849	24,946	1,338	239,307	1,152	96,055	538	39,532
Size of net worth:								
Negative net worth.....	2	4	1	12	2	4	--	--
\$1 under \$600,000.....	139	832	75	3,149	69	1,191	47	2,112
\$600,000 under \$1,000,000.....	363	10,093	544	52,696	462	23,382	224	11,705
\$1,000,000 under \$2,500,000.....	275	11,103	523	78,804	461	35,526	208	16,218
\$2,500,000 under \$5,000,000.....	49	2,186	126	37,153	100	12,031	38	4,342
\$5,000,000 under \$10,000,000.....	15	502	47	27,941	36	6,636	15	3,712
\$10,000,000 under \$20,000,000.....	4	139	15	12,102	13	6,515	3	609
\$20,000,000 or more.....	2	86	8	27,451	9	10,772	2	835

Personal Wealth, 1998

Table 1.--Personal Wealth, 1998: Type of Property by Size of Net Worth--Continued

[All figures are estimates based on samples--numbers are in thousands, money amounts are in millions of dollars]

Size of net worth	Unclassifiable mutual funds		Cash and money market accounts		Mortgages and notes		Cash value life insurance	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)
Total.....	1,659	111,718	6,365	1,014,273	1,396	291,600	4,573	221,118
Size of net worth:								
Negative net worth.....	2	26	29	1,084	5	1,188	35	3,342
\$1 under \$600,000.....	249	7,707	1,200	51,733	163	10,571	1,187	65,416
\$600,000 under \$1,000,000.....	657	36,754	2,438	274,069	464	58,968	1,620	51,804
\$1,000,000 under \$2,500,000.....	571	38,373	2,020	347,609	497	88,437	1,315	63,233
\$2,500,000 under \$5,000,000.....	121	12,101	435	123,887	156	47,906	274	21,965
\$5,000,000 under \$10,000,000.....	41	6,122	164	87,397	70	29,547	97	9,309
\$10,000,000 under \$20,000,000.....	11	3,251	50	42,049	23	19,201	27	3,094
\$20,000,000 or more.....	7	7,384	29	86,446	18	35,783	19	2,954
Size of net worth	Noncorporate business assets		Limited partnerships		Retirement assets		Other assets	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)
Total.....	1,148	264,256	805	232,879	3,857	1,017,641	5,782	310,035
Size of net worth:								
Negative net worth.....	11	2,699	1	958	9	1,436	34	1,403
\$1 under \$600,000.....	209	22,014	50	2,864	836	95,343	1,119	30,267
\$600,000 under \$1,000,000.....	351	43,097	230	10,726	1,410	259,392	2,155	62,733
\$1,000,000 under \$2,500,000.....	386	76,596	331	30,973	1,194	381,213	1,840	85,369
\$2,500,000 under \$5,000,000.....	110	38,424	105	29,066	262	137,971	404	37,926
\$5,000,000 under \$10,000,000.....	50	31,129	49	23,932	96	77,434	152	32,234
\$10,000,000 under \$20,000,000.....	18	25,786	23	46,758	32	33,523	49	15,363
\$20,000,000 or more.....	14	24,511	16	87,602	19	31,329	27	44,738

Personal Wealth, 1998

Table 2.-- Personal Wealth, 1998: Male Top Wealthholders, Type of Property, by Size of Net Worth

[All figures are estimates based on samples--numbers are in thousands, money amounts are in millions of dollars]

Size of net worth	Total assets		Debts and mortgages		Net worth		Personal residence	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Total.....	3,997	6,955,881	3,115	720,436	3,997	6,235,446	2,894	607,398
Size of net worth:								
Negative net worth.....	36	33,841	36	84,915	36	-51,073	20	4,389
\$1 under \$600,000.....	971	516,466	856	154,914	971	361,552	741	117,785
\$600,000 under \$1,000,000.....	1,329	1,143,758	964	113,178	1,329	1,030,580	939	150,338
\$1,000,000 under \$2,500,000.....	1,236	1,993,000	911	154,675	1,236	1,838,325	881	192,275
\$2,500,000 under \$5,000,000.....	271	985,704	216	64,319	271	921,385	199	68,364
\$5,000,000 under \$10,000,000.....	101	738,746	86	51,218	101	687,528	76	35,393
\$10,000,000 under \$20,000,000.....	33	479,531	27	30,871	33	448,659	24	18,277
\$20,000,000 or more.....	20	1,064,835	18	66,346	20	998,488	15	20,578
Size of net worth	Investment real estate		Closely held stock		Other stocks		State and local bonds	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Total.....	2,389	995,780	966	996,910	2,898	1,508,805	1,040	312,995
Size of net worth:								
Negative net worth.....	22	14,355	7	3,070	13	1,120	--	--
\$1 under \$600,000.....	448	91,300	167	25,139	569	49,659	63	1,936
\$600,000 under \$1,000,000.....	780	186,228	232	60,326	984	217,607	332	33,373
\$1,000,000 under \$2,500,000.....	814	297,686	348	181,930	969	430,310	438	77,858
\$2,500,000 under \$5,000,000.....	203	146,622	122	140,297	227	229,542	123	49,784
\$5,000,000 under \$10,000,000.....	76	102,395	55	139,972	89	180,771	53	43,925
\$10,000,000 under \$20,000,000.....	28	62,574	20	105,935	29	122,404	19	42,831
\$20,000,000 or more.....	18	94,619	15	340,240	19	277,394	12	63,288
Size of net worth	Federal savings bonds		Other Federal bonds		Corporate and foreign bonds		Bond funds	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
Total.....	494	12,396	667	127,689	618	55,836	293	24,476
Size of net worth:								
Negative net worth.....	2	4	--	--	2	4	--	--
\$1 under \$600,000.....	100	499	53	2,493	46	807	28	1,311
\$600,000 under \$1,000,000.....	191	4,894	228	16,601	211	10,252	111	6,261
\$1,000,000 under \$2,500,000.....	159	5,219	277	41,696	259	19,506	117	9,388
\$2,500,000 under \$5,000,000.....	27	1,270	70	21,708	63	7,895	24	3,355
\$5,000,000 under \$10,000,000.....	10	344	25	18,808	23	3,963	9	3,094
\$10,000,000 under \$20,000,000.....	3	105	10	7,404	9	5,050	2	445
\$20,000,000 or more.....	1	59	4	18,980	6	8,360	1	622

Personal Wealth, 1998

Table 2.-- Personal Wealth, 1998: Male Top Wealthholders, Type of Property, by Size of Net Worth --Continued

[All figures are estimates based on samples--numbers are in thousands, money amounts are in millions of dollars]

Size of net worth	Unclassifiable mutual funds		Cash and money market accounts		Mortgages and notes		Cash value life insurance	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)
Total.....	991	68,440	3,881	595,195	883	188,439	3,242	188,042
Size of net worth:								
Negative net worth.....	1	1	26	1,069	5	1,188	33	3,180
\$1 under \$600,000.....	182	4,874	926	37,837	123	7,274	931	54,200
\$600,000 under \$1,000,000.....	347	18,571	1,301	131,364	259	30,478	1,030	41,695
\$1,000,000 under \$2,500,000.....	342	23,592	1,209	199,775	319	57,416	934	54,844
\$2,500,000 under \$5,000,000.....	80	8,886	267	78,411	101	26,633	205	20,093
\$5,000,000 under \$10,000,000.....	26	4,167	100	52,975	46	22,445	73	8,620
\$10,000,000 under \$20,000,000.....	8	1,417	32	28,037	16	14,473	21	2,710
\$20,000,000 or more.....	5	6,931	20	65,727	13	28,533	15	2,701

Size of net worth	Noncorporate business assets		Limited partnerships		Retirement assets		Other assets	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)
Total.....	842	191,560	481	149,237	2,508	737,654	3,562	195,032
Size of net worth:								
Negative net worth.....	11	2,699	1	583	8	857	31	1,322
\$1 under \$600,000.....	184	19,692	34	2,201	639	75,913	870	23,545
\$600,000 under \$1,000,000.....	243	32,593	122	4,999	803	162,356	1,167	35,822
\$1,000,000 under \$2,500,000.....	271	56,114	197	18,222	773	272,199	1,107	54,973
\$2,500,000 under \$5,000,000.....	76	28,578	69	21,014	182	111,220	245	22,034
\$5,000,000 under \$10,000,000.....	34	21,343	33	14,625	68	64,866	92	21,040
\$10,000,000 under \$20,000,000.....	13	9,807	15	21,586	22	28,499	31	7,977
\$20,000,000 or more.....	11	20,733	12	66,006	14	21,743	19	28,320

Personal Wealth, 1998

Table 3.--Personal Wealth, 1998: Female Top Wealthholders, Type of Property, by Size of Net Worth

[All figures are estimates based on samples--numbers are in thousands, money amounts are in millions of dollars]

Size of net worth	Total assets		Debts and mortgages		Net worth		Personal residence	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Total.....	2,533	4,186,907	1,905	236,775	2,533	3,950,132	1,876	472,645
Size of net worth:								
Negative net worth.....	3	2,512	3	5,172	3	-2,661	3	543
\$1 under \$600,000.....	282	154,921	249	40,469	282	114,452	224	40,706
\$600,000 under \$1,000,000.....	1,165	966,814	820	58,995	1,165	907,818	825	168,965
\$1,000,000 under \$2,500,000.....	822	1,296,005	618	67,649	822	1,228,355	627	159,677
\$2,500,000 under \$5,000,000.....	169	584,050	141	25,443	169	558,606	126	51,126
\$5,000,000 under \$10,000,000.....	65	457,354	52	19,252	65	438,102	50	30,086
\$10,000,000 under \$20,000,000.....	18	263,425	15	8,859	18	254,566	14	13,609
\$20,000,000 or more.....	9	461,826	7	10,934	9	450,892	8	7,932
Size of net worth	Investment real estate		Closely held stock		Other stocks		State and local bonds	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Total.....	1,453	535,986	321	328,170	1,955	1,200,629	1,033	320,113
Size of net worth:								
Negative net worth.....	2	703	1	17	1	1	--	--
\$1 under \$600,000.....	130	25,307	33	6,353	179	18,763	39	1,241
\$600,000 under \$1,000,000.....	616	125,490	85	18,686	863	201,530	427	52,614
\$1,000,000 under \$2,500,000.....	518	187,026	124	54,970	681	355,498	406	98,322
\$2,500,000 under \$5,000,000.....	121	84,662	45	42,509	149	191,402	102	60,488
\$5,000,000 under \$10,000,000.....	46	49,956	23	58,930	58	169,862	42	48,915
\$10,000,000 under \$20,000,000.....	13	23,308	7	32,957	15	90,715	11	21,955
\$20,000,000 or more.....	7	39,535	5	113,749	8	172,859	6	36,578
Size of net worth	Federal savings bonds		Other Federal bonds		Corporate and foreign bonds		Bond funds	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
Total.....	356	12,550	671	111,617	533	40,220	245	15,057
Size of net worth:								
Negative net worth.....	--	--	1	12	--	--	--	--
\$1 under \$600,000.....	39	333	22	656	24	383	19	801
\$600,000 under \$1,000,000.....	172	5,199	316	36,095	251	13,130	113	5,443
\$1,000,000 under \$2,500,000.....	115	5,884	246	37,108	202	16,021	91	6,831
\$2,500,000 under \$5,000,000.....	22	916	56	15,445	37	4,137	14	987
\$5,000,000 under \$10,000,000.....	5	158	22	9,133	13	2,673	6	618
\$10,000,000 under \$20,000,000.....	1	34	6	4,698	5	1,465	1	165
\$20,000,000 or more.....	1	27	3	8,471	2	2,411	1	213

Personal Wealth, 1998

Table 3.--Personal Wealth, 1998: Female Top Wealthholders, Type of Property, by Size of Net Worth --Continued

[All figures are estimates based on samples--numbers are in thousands, money amounts are in millions of dollars]

Size of net worth	Unclassifiable mutual funds		Cash and money market accounts		Mortgages and notes		Cash value life insurance	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)
Total.....	668	43,278	2,485	419,078	513	103,161	1,331	33,076
Size of net worth:								
Negative net worth.....	1	24	2	15	1	1	2	163
\$1 under \$600,000.....	66	2,833	273	13,896	40	3,297	256	11,216
\$600,000 under \$1,000,000.....	311	18,183	1,138	142,705	204	28,490	590	10,109
\$1,000,000 under \$2,500,000.....	229	14,781	811	147,834	178	31,021	381	8,389
\$2,500,000 under \$5,000,000.....	41	3,216	168	45,475	55	21,273	68	1,873
\$5,000,000 under \$10,000,000.....	14	1,955	64	34,422	24	7,102	24	689
\$10,000,000 under \$20,000,000.....	4	1,834	18	14,012	6	4,728	6	384
\$20,000,000 or more.....	2	452	9	20,719	5	7,251	4	253

Size of net worth	Noncorporate business assets		Limited partnerships		Retirement assets		Other assets	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)
Total.....	306	72,696	324	83,642	1,349	279,987	2,220	115,003
Size of net worth:								
Negative net worth.....	--	--	--	375	2	579	3	82
\$1 under \$600,000.....	25	2,322	16	662	197	19,430	249	6,723
\$600,000 under \$1,000,000.....	109	10,503	108	5,727	607	97,036	989	26,911
\$1,000,000 under \$2,500,000.....	115	20,482	134	12,751	421	109,014	733	30,397
\$2,500,000 under \$5,000,000.....	34	9,846	36	8,052	80	26,751	159	15,893
\$5,000,000 under \$10,000,000.....	16	9,786	16	9,308	28	12,568	60	11,194
\$10,000,000 under \$20,000,000.....	5	15,980	8	25,172	9	5,023	18	7,386
\$20,000,000 or more.....	3	3,777	5	21,596	5	9,586	9	16,418

Personal Wealth, 1998

Table 4.--Male Top Wealthholders, 1998: Type of Property, by Age

[All figures are estimates based on samples--numbers are in thousands, money amounts are in millions of dollars]

Age	Total assets		Debts and mortgages		Net worth		Personal residence	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Total.....	3,997	6,955,881	3,115	720,436	3,997	6,235,446	2,894	607,398
Age								
Under 50.....	1,582	2,223,439	1,357	344,444	1,582	1,878,995	1,100	230,423
50 under 65.....	1,408	2,667,849	1,122	292,202	1,408	2,375,647	1,094	233,613
65 under 75.....	638	1,284,573	415	65,370	638	1,219,203	467	97,484
75 under 85.....	262	508,571	154	13,693	262	494,878	176	34,513
85 and older.....	107	271,449	68	4,727	107	266,723	57	11,365
Age	Investment real estate		Closely held stock		Other stocks		State and local bonds	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Total.....	2,389	995,780	966	996,910	2,898	1,508,805	1,040	312,995
Age								
Under 50.....	778	290,928	414	389,605	1,064	435,275	255	76,328
50 under 65.....	953	426,395	379	393,157	1,035	516,884	315	72,925
65 under 75.....	440	189,586	132	140,133	497	308,455	260	73,197
75 under 85.....	166	64,214	32	35,230	215	155,197	145	57,251
85 and older.....	52	24,658	8	38,785	87	92,995	65	33,294
Age	Federal savings bonds		Other Federal bonds		Corporate and foreign bonds		Bond funds	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
Total.....	494	12,396	667	127,689	618	55,836	293	24,476
Age								
Under 50.....	149	1,538	168	37,774	144	10,404	82	8,456
50 under 65.....	185	3,088	213	32,184	216	20,030	113	8,030
65 under 75.....	99	4,431	164	31,059	159	14,239	57	4,749
75 under 85.....	43	2,126	85	15,582	72	6,487	31	2,266
85 and older.....	17	1,213	37	11,091	28	4,676	10	975

Personal Wealth, 1998

Table 4.--Male Top Wealthholders, 1998: Type of Property, by Age--Continued

[All figures are estimates based on samples--numbers are in thousands, money amounts are in millions of dollars]

Age	Unclassifiable mutual funds		Cash and money market accounts		Mortgages and notes		Cash value life insurance	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)
Total.....	991	68,440	3,881	595,195	883	188,439	3,242	188,042
Age								
Under 50.....	326	21,868	1,513	188,396	295	66,311	1,302	69,436
50 under 65.....	385	26,524	1,375	203,772	325	68,140	1,203	87,973
65 under 75.....	190	13,812	628	120,115	181	38,544	484	22,536
75 under 85.....	68	4,739	258	56,178	62	11,395	191	6,430
85 and older.....	22	1,497	106	26,733	19	4,049	63	1,667

Age	Noncorporate business assets		Limited partnerships		Retirement assets		Other assets	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)
Total.....	842	191,560	481	149,237	2,508	737,654	3,562	195,032
Age								
Under 50.....	334	76,364	126	51,909	978	201,975	1,375	66,450
50 under 65.....	329	80,254	195	60,410	980	356,532	1,296	77,938
65 under 75.....	125	25,728	103	21,884	399	146,978	574	31,645
75 under 85.....	43	7,046	45	11,699	125	28,089	230	10,129
85 and older.....	12	2,168	11	3,334	26	4,079	87	8,871

Personal Wealth, 1998

Table 5.--Female Top Wealthholders, 1998: Type of Property, by Age

[All figures are estimates based on samples--numbers are in thousands, money amounts are in millions of dollars]

Age	Total assets		Debts and mortgages		Net worth		Personal residence	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Total.....	2,533	4,186,907	1,905	236,775	2,533	3,950,132	1,876	472,645
Age								
Under 50.....	736	1,208,760	603	114,348	736	1,094,411	555	150,397
50 under 65.....	724	1,187,252	547	77,770	724	1,109,482	593	157,752
65 under 75.....	505	802,520	341	26,970	505	775,550	384	88,748
75 under 85.....	404	675,508	290	13,253	404	662,255	271	58,874
85 and older.....	164	312,866	124	4,434	164	308,433	73	16,874

Age	Investment real estate		Closely held stock		Other stocks		State and local bonds	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Total.....	1,453	535,986	321	328,170	1,955	1,200,629	1,033	320,113
Age								
Under 50.....	367	124,695	127	151,352	503	312,688	184	55,523
50 under 65.....	480	204,353	118	103,551	587	284,985	266	61,123
65 under 75.....	318	108,254	49	44,566	406	229,532	261	79,500
75 under 85.....	218	74,070	20	21,114	326	233,285	230	86,066
85 and older.....	71	24,613	6	7,588	134	140,139	92	37,901

Age	Federal savings bonds		Other Federal bonds		Corporate and foreign bonds		Bond funds	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
Total.....	356	12,550	671	111,617	533	40,220	245	15,057
Age								
Under 50.....	74	563	135	33,020	96	8,247	46	3,791
50 under 65.....	105	2,792	177	20,720	154	12,080	83	3,818
65 under 75.....	82	3,978	146	21,325	132	9,283	55	3,579
75 under 85.....	67	3,391	150	23,176	111	7,071	38	1,947
85 and older.....	27	1,826	63	13,376	41	3,539	22	1,921

Personal Wealth, 1998

Table 5.--Female Top Wealthholders, 1998: Type of Property, by Age--Continued

[All figures are estimates based on samples--numbers are in thousands, money amounts are in millions of dollars]

Age	Unclassifiable mutual funds		Cash and money market accounts		Mortgages and notes		Cash value life insurance	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)
Total.....	668	43,278	2,485	419,078	513	103,161	1,331	33,076
Age								
Under 50.....	180	11,609	715	103,000	149	45,395	460	13,027
50 under 65.....	219	13,974	706	104,445	135	21,674	442	12,690
65 under 75.....	144	9,144	500	87,012	121	18,089	219	3,958
75 under 85.....	93	6,226	401	85,715	85	14,271	162	2,784
85 and older.....	33	2,324	163	38,905	23	3,732	47	617

Age	Noncorporate business assets		Limited partnerships		Retirement assets		Other assets	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)
Total.....	306	72,696	324	83,642	1,349	279,987	2,220	115,003
Age								
Under 50.....	105	33,668	70	31,698	445	95,963	615	34,123
50 under 65.....	102	23,602	111	23,978	469	101,498	669	34,217
65 under 75.....	52	7,280	81	13,795	264	54,452	455	20,024
75 under 85.....	34	6,038	49	10,756	145	24,040	359	16,684
85 and older.....	13	2,107	13	3,415	26	4,034	122	9,954

Personal Wealth, 1998

Table 6.--Top Wealthholders with Net Worth Under \$20,000,000 and Gross Assets of \$625,000 or More, 1998: Total and Selected Assets, Debts and Mortgages, and Net Worth, by State of Residence

[All figures are estimates based on estate tax return samples--numbers are in thousands, money amounts are in millions]

State of residence	Total assets		Debts and mortgages		Net worth	
	Number	Amount	Number	Amount	Number	Amount
	(1)	(2)	(3)	(4)	(5)	(6)
Total.....	6,501	9,616,127	4,995	879,931	6,501	8,736,196
State of residence:						
Alabama.....	64	95,848	53	8,622	64	87,226
Alaska.....	12	16,897	9	2,148	12	14,749
Arizona.....	105	141,991	87	10,366	105	131,625
Arkansas.....	35	48,543	27	5,709	35	42,835
California.....	895	1,423,650	738	164,954	895	1,258,696
Colorado.....	120	187,246	90	20,706	120	166,540
Connecticut.....	121	197,524	99	12,721	121	184,804
Delaware.....	19	25,208	14	2,164	19	23,043
District of Columbia.....	45	55,158	42	7,831	45	47,327
Florida.....	461	746,651	332	83,340	461	663,312
Georgia.....	163	240,109	136	29,724	163	210,385
Hawaii.....	25	30,986	21	4,133	25	26,853
Idaho.....	27	37,907	22	2,429	27	35,477
Illinois.....	310	498,267	253	44,690	310	453,577
Indiana.....	91	122,264	62	8,465	91	113,799
Iowa.....	79	82,349	61	7,985	79	74,364
Kansas.....	60	79,855	43	8,906	60	70,950
Kentucky.....	56	91,964	41	6,496	56	85,468
Louisiana.....	68	98,895	58	9,419	68	89,476
Maine.....	15	23,549	10	1,411	15	22,138
Maryland.....	132	176,119	107	15,041	132	161,078
Massachusetts.....	205	281,523	167	27,115	205	254,409
Michigan.....	203	271,213	142	19,075	203	252,138
Minnesota.....	114	146,828	81	11,283	114	135,546
Mississippi.....	34	49,803	29	3,460	34	46,343
Missouri.....	111	161,460	78	12,061	111	149,399
Montana.....	23	34,958	17	4,169	23	30,789
Nebraska.....	56	66,175	38	6,220	56	59,955
Nevada.....	38	76,998	30	6,181	38	70,817
New Hampshire.....	31	44,234	24	3,657	31	40,578
New Jersey.....	264	386,032	183	23,001	264	363,031
New Mexico.....	21	38,833	19	4,006	21	34,827
New York.....	565	869,428	435	74,213	565	795,215
North Carolina.....	175	238,177	133	23,511	175	214,666
North Dakota.....	21	21,371	12	4,108	21	17,263
Ohio.....	233	313,112	150	20,403	233	292,709
Oklahoma.....	49	75,883	34	7,652	49	68,231
Oregon.....	72	106,012	53	10,645	72	95,368
Pennsylvania.....	261	393,377	199	25,584	261	367,793
Rhode Island.....	28	42,301	24	2,879	28	39,422
South Carolina.....	92	122,632	72	10,751	92	111,882
South Dakota.....	13	19,351	8	998	13	18,353
Tennessee.....	109	146,733	79	13,020	109	133,712
Texas.....	370	544,314	297	45,923	370	498,391
Utah.....	37	49,997	27	4,633	37	45,364
Vermont.....	11	17,437	9	1,139	11	16,299
Virginia.....	165	234,400	134	20,644	165	213,756
Washington.....	131	202,297	103	18,850	131	183,447
West Virginia.....	30	39,129	17	2,058	30	37,070
Wisconsin.....	110	154,240	81	11,682	110	142,558
Wyoming.....	7	13,100	5	854	7	12,246
Other areas.....	21	33,800	13	2,899	21	30,901

Personal Wealth, 1998

Table 6.--Top Wealthholders with Net Worth Under \$20,000,000 and Gross Assets of \$625,000 or More, 1998: Total and Selected Assets, Debts and Mortgages, and Net Worth, by State of Residence
--Continued

[All figures are estimates based on estate tax return samples--numbers are in thousands, money amounts are in millions]

State of residence	Real estate		Corporate stock		Cash		Total bonds	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Total.....	5,834	2,449,146	5,218	3,130,272	3,422	893,940	6,336	927,827
State of residence:								
Alabama.....	58	23,920	55	34,638	30	8,469	63	8,052
Alaska.....	10	3,960	9	5,361	3	696	12	1,315
Arizona.....	93	33,637	86	46,978	57	15,812	103	12,426
Arkansas.....	33	10,361	30	18,145	16	3,261	35	4,535
California.....	823	539,582	694	365,527	470	113,802	872	131,679
Colorado.....	108	55,855	96	56,834	50	13,892	116	12,285
Connecticut.....	105	44,983	92	68,295	64	19,687	120	19,683
Delaware.....	18	5,237	17	10,605	13	1,909	19	2,441
District of Columbia.....	43	13,697	21	11,299	35	12,726	45	10,435
Florida.....	415	154,591	385	276,053	266	94,302	441	65,772
Georgia.....	144	67,675	127	85,109	63	13,585	159	20,584
Hawaii.....	23	10,588	19	9,881	16	1,578	24	3,248
Idaho.....	26	13,277	23	11,469	11	1,983	26	2,905
Illinois.....	269	114,711	259	160,923	176	47,096	305	47,456
Indiana.....	83	29,550	69	43,095	51	11,116	88	11,556
Iowa.....	72	24,197	56	21,805	37	5,376	78	9,461
Kansas.....	55	17,475	50	27,293	27	6,398	60	6,915
Kentucky.....	53	20,785	45	39,107	25	5,859	55	7,993
Louisiana.....	59	24,866	57	26,771	37	10,326	65	12,242
Maine.....	12	4,261	13	9,535	10	2,041	14	2,077
Maryland.....	124	43,993	112	58,764	71	16,787	130	16,773
Massachusetts.....	182	83,115	154	85,687	100	27,140	200	25,765
Michigan.....	179	59,907	168	99,031	113	21,040	199	30,000
Minnesota.....	106	29,512	95	49,163	67	13,708	109	12,284
Mississippi.....	32	11,596	27	18,041	18	3,699	33	4,545
Missouri.....	97	34,739	94	60,874	60	15,639	109	14,098
Montana.....	20	11,990	17	7,825	13	2,173	23	2,713
Nebraska.....	47	15,665	44	25,834	27	4,308	56	5,824
Nevada.....	34	18,055	33	24,021	22	9,758	38	10,050
New Hampshire.....	26	9,994	25	18,245	19	4,276	30	3,007
New Jersey.....	235	76,944	226	138,510	158	41,439	259	45,047
New Mexico.....	21	9,295	18	17,794	9	1,982	21	2,499
New York.....	470	205,256	409	257,082	278	101,540	540	91,770
North Carolina.....	166	70,216	149	80,218	74	15,330	172	18,881
North Dakota.....	19	5,565	16	2,658	8	1,888	20	2,713
Ohio.....	205	62,586	194	115,195	113	26,075	227	32,501
Oklahoma.....	42	11,876	41	26,905	24	8,258	47	11,531
Oregon.....	64	27,301	57	34,568	39	9,388	70	6,974
Pennsylvania.....	224	66,713	210	132,039	164	39,807	252	37,059
Rhode Island.....	25	10,115	24	18,657	19	3,553	28	3,450
South Carolina.....	85	34,694	75	48,049	41	8,932	88	7,825
South Dakota.....	13	4,361	10	5,865	5	1,287	11	1,716
Tennessee.....	106	38,083	87	47,054	51	9,784	105	16,973
Texas.....	344	111,329	304	161,607	203	61,363	368	61,126
Utah.....	34	13,139	27	17,951	15	2,714	35	3,507
Vermont.....	10	4,078	10	8,897	4	1,345	11	1,530
Virginia.....	154	53,894	138	87,796	89	17,007	161	23,562
Washington.....	123	59,202	115	63,061	75	14,970	130	18,672
West Virginia.....	25	6,201	23	16,900	14	2,761	30	3,440
Wisconsin.....	98	34,910	92	58,753	64	11,387	108	13,238
Wyoming.....	6	2,625	6	3,763	4	1,467	7	1,099
Other areas.....	17	8,990	15	10,740	7	3,219	21	4,598

Personal Wealth, 1998

Table 7.--Top Wealthholders with Net Worth of \$1 Million or More, 1998: Total Assets, Debts and Mortgages, and Net Worth, by State of Residence

[All figures are estimates based on estate tax returns are in thousands--money amounts are in millions]

State of residence	Total assets		Debts and mortgages		Net worth	
	Number	Amount	Number	Amount	Number	Amount
	(1)	(2)	(3)	(4)	(5)	(6)
Total.....	2,743	8,324,476	2,092	499,568	2,743	7,824,909
State of residence:						
Alabama.....	30	81,295	26	6,958	30	74,337
Alaska.....	6	12,683	4	996	6	11,686
Arizona.....	42	123,801	32	5,155	42	118,646
Arkansas.....	14	41,292	10	1,674	14	39,618
California.....	412	1,238,816	341	98,566	412	1,140,250
Colorado.....	56	150,016	42	8,173	56	141,843
Connecticut.....	65	193,805	58	10,799	65	183,006
Delaware.....	7	16,824	5	1,110	7	15,714
District of Columbia.....	8	23,874	7	2,240	8	21,635
Florida.....	206	649,441	151	34,606	206	614,835
Georgia.....	64	194,151	50	12,682	64	181,469
Hawaii.....	7	21,163	5	1,745	7	19,418
Idaho.....	10	24,964	8	952	10	24,012
Illinois.....	146	422,207	115	23,720	146	398,488
Indiana.....	35	123,224	23	4,628	35	118,596
Iowa.....	26	47,013	18	2,161	26	44,852
Kansas.....	20	56,880	13	4,512	20	52,368
Kentucky.....	24	76,780	18	3,271	24	73,509
Louisiana.....	24	74,558	20	5,296	24	69,262
Maine.....	8	19,519	6	1,010	8	18,509
Maryland.....	53	137,365	41	8,014	53	129,351
Massachusetts.....	81	219,383	69	17,263	81	202,120
Michigan.....	74	206,350	53	9,071	74	197,279
Minnesota.....	37	107,509	26	5,480	37	102,029
Mississippi.....	16	60,739	14	1,585	16	59,154
Missouri.....	50	127,135	34	5,578	50	121,557
Montana.....	10	24,577	8	2,936	10	21,641
Nebraska.....	17	41,387	10	3,045	17	38,343
Nevada.....	21	93,829	16	7,183	21	86,646
New Hampshire.....	16	37,061	11	2,243	16	34,819
New Jersey.....	116	359,094	79	21,234	116	337,860
New Mexico.....	11	85,483	9	4,017	11	81,466
New York.....	243	906,742	188	51,193	243	855,549
North Carolina.....	62	223,081	43	13,958	62	209,123
North Dakota.....	5	10,940	3	1,072	5	9,867
Ohio.....	85	236,997	58	10,742	85	226,254
Oklahoma.....	21	57,483	13	3,375	21	54,108
Oregon.....	27	74,671	21	5,286	27	69,385
Pennsylvania.....	122	320,611	93	16,640	122	303,971
Rhode Island.....	11	30,953	7	1,231	11	29,722
South Carolina.....	33	100,376	24	5,811	33	94,565
South Dakota.....	6	15,102	4	158	6	14,944
Tennessee.....	42	124,081	31	7,345	42	116,736
Texas.....	156	477,526	123	28,263	156	449,263
Utah.....	16	45,522	11	1,989	16	43,533
Vermont.....	4	13,098	4	458	4	12,641
Virginia.....	67	188,564	56	10,075	67	178,488
Washington.....	58	178,716	44	13,265	58	165,450
West Virginia.....	11	29,096	5	945	11	28,150
Wisconsin.....	48	143,773	34	7,164	48	136,609
Wyoming.....	3	15,398	2	503	3	14,895
Other areas.....	10	39,528	7	2,192	10	37,336

Personal Wealth, 1998

by Barry W. Johnson and Lisa M. Schreiber

There were more than 6.5 million individuals in the United States with gross assets of \$625,000 or more in 1998. These “top wealth holders” represented about 3.4 percent of the total U.S. adult population. As a group, top wealth holders owned more than \$11.1 trillion in assets, or almost 32.6 percent of total U.S. personal asset holdings. Almost 4.0 million, or 61.2 percent, of these wealthy individuals were male, and 2.5 million were female. The number of millionaires in the United States grew to more than 2.7 million in 1998.

Background

The distribution and composition of personal wealth in the United States are topics of great interest among researchers and policy planners. Unfortunately, these issues are difficult to research, since there are few sources of data on the wealth holdings of the general population, especially the very rich. Federal estate tax returns (Form 706) provide a unique source from which to study the nation’s wealthiest individuals. The estate tax return contains a complete listing of a decedent’s assets and debts, as well as a demographic profile of the decedent and information on the costs of administering the estate. A decedent’s estate has up to 9 months to file an estate tax return, but use of a 6-month extension is common. It is, therefore, necessary to combine returns filed over a number of calendar years in order to capture data representative of all estate tax decedents dying in a single year.

The estate multiplier technique is used to estimate the wealth of living individuals from Federal estate tax return data. The fundamental assumption underlying this methodology is that estate tax returns filed for decedents who died in a particular year represent a random sample, designated by death, of the living population in that year. Estimates of the wealth holdings of the living population are derived by applying a multiplier, based on appropriate mortality rates, to this sample.

Limitations

While the sample size and richness of available data make this estimation technique attractive, there are limitations to be noted. First, and most important, estate tax returns provide a presumably random sample, stratified by age, not of the total population, but of living persons with gross estates at or above the estate tax filing threshold. Research has proven that “individuals who are economically or socially better off also live longer, on average, and are healthier” [1]. Factors such as access to better health services, better diet and nutrition, fewer risks on the job, and access to better housing seem to contribute to this phenomenon. Therefore, determining a mortality rate appropriate to this sample poses a challenge. It has also been shown that, while estimates of patterns of wealth holding, such as differences in portfolio composition among various age and sex groups, appear quite robust over a variety of reasonable alternate assumptions about the longevity of the very wealthy, overall aggregate estimates are relatively sensitive to the selection of the mortality rates [2]. (See the Appendix to this article for a more complete discussion of the estate multiplier technique.)

Second, while estate tax returns are generally prepared by professionals and are, therefore, likely to be more accurate in detail than survey responses, the values reported are used to compute tax liability; so, there is a natural tendency for the values to be somewhat conservative. This is especially true for hard-to-value assets, such as businesses and certain types of real estate. It should also be noted that the estate tax data used for these estimates are pre-audit figures. A recent Statistics of Income (SOI) study, based on the results of IRS audits of estate tax returns filed in 1992, estimated that detected under valuation of assets was about 1.2 percent of total asset holdings [3]. In addition, it is common to claim substantial minority discounts when valuing ownership interests of less than 50 percent in small companies, partnerships, and other, non-liquid assets [4].

Third, while estate tax returns report assets that are owned outright (what has been called prime wealth), total wealth would ideally include wealth to which a person has an income interest but not necessarily actual title. Examples of the latter include defined-benefit pension plans and Social Security benefits.

Barry W. Johnson and Lisa M. Schreiber are economists in the Special Studies Special Projects Section. This article was prepared under the direction of Michael Alexander, former Chief, now retired.

Personal Wealth, 1998

Finally, the wealth of some individuals near death may differ somewhat from that of the general population in the same age cohort. For some, wealth will have been reduced through expenses related to a final illness. For others, effective estate planning will have reduced the value of the estate reportable for tax purposes.

Valuation Measures

The level of wealth to which these estimates apply is \$625,000 or more in gross estate, the Federal estate tax filing threshold in effect for 1998 U.S. decedents. *Gross estate* is a Federal estate tax concept of wealth that does not conform to usual definitions of wealth, primarily because it includes the face value of life insurance in the wealth of the decedent. Therefore, three measures of wealth are used in this article: gross assets (or gross estate), total assets, and net worth.

Gross assets reflects the gross value of all assets, including the full face value of life insurance, reduced by the value of any policy loans, but excluding any reduction for other indebtedness. This measure defines the individuals included in the top wealth-holder group. *Total assets* is a lower wealth value, but is still essentially a gross measure. It differs from gross assets in that the cash, or equity, value of life insurance (i.e., the value of insurance immediately before the policyholder's death) replaces the "at death" value of life insurance included in gross assets [5]. *Total assets* is the valuation concept on which all the analyses in this article are based. *Net worth* is total assets minus debts.

Top Wealth Holders, 1998

In 1998, there were an estimated 6.5 million adults in the U.S., age 18 and older, with gross assets of \$625,000 or more. The combined total assets for this group was more than \$11.1 trillion. By factoring in the \$957.2 billion in debts held by top wealth holders, the resulting combined net worth was almost \$10.2 trillion. Although they accounted for only about 3.4 percent of the U.S. adult population, the net worth of these top wealth holders made up more than 35.2 percent of total U.S. personal net worth in 1998 [6].

Men made up 61.2 percent of the top wealth-holder population in 1998. The estimated 4.0 million men held almost \$7.0 trillion in total assets, making up approximately 62.4 percent of the value of the top wealth holders' asset pool. Almost 1.7 million male top wealth holders were reported to have had a net worth of \$1 million or more. A large majority, 69.5 percent, of male top wealth holders were married, a significantly higher proportion than the 61.7 percent of all adult men in the United States who were married in 1998 (see Figure A). Only 15.0 percent of male top wealth holders were single, as compared to the 26.9 percent of males who were single in the overall U.S. population [7].

There were more than 2.5 million women top wealth holders in 1998. The combined value of their total assets was approximately \$4.2 trillion. Almost 1.1 million of the female top wealth holders had a net worth of \$1 million or more. The distribution of wealthy women, by marital status, was quite different from that of their counterparts in the overall U.S. population. Married women made up 47.0 percent of

Figure A

Top Wealth Holders, 1998: Marital Status, by Sex

Marital status	Male			Female		
	Number of top wealth holders (in thousands)	Percentage of top wealth holders population	Percentage of U.S. population	Number of top wealth holders (in thousands)	Percentage of top wealth holders population	Percentage of U.S. population
	(1)	(2)	(3)	(4)	(5)	(6)
Total	3,997	100.0	100.0	2,533	100.0	100.0
Married.....	2,779	69.5	61.7	1,190	47.0	57.9
Widowed.....	264	6.6	2.7	722	28.5	10.8
Single.....	598	15.0	26.9	351	13.9	20.5
Other ¹	356	8.9	8.8	270	10.7	10.8

¹ Includes individuals who were separated or divorced and those for whom marital status was not determinable.

NOTE: Detail may not add to totals because of rounding.

Personal Wealth, 1998

all female top wealth holders, while 57.9 percent of all adult women in the U.S. were married in 1998. Likewise, while just 13.9 percent of wealthy women were single, single women made up 20.5 percent of the adult female population. Conversely, widowed women made up 28.5 percent of the female top wealth holders, which is significantly higher than the percentage of women in the United States who were widows in 1998, 10.8 percent.

Portfolio Composition

There were significant differences in portfolio allocation between top wealth holders in 1998 and similar individuals in 1995, the last year for which SOI estimates are available. Overall, 1998 top wealth holders invested more in publicly traded stock and cash and money market accounts than similar individuals in 1995, and they invested less in other financial assets (including Federal, corporate, and tax-exempt bonds, as well as mixed portfolio mutual funds) and investment real estate [8]. Growth in the number of online investment services and increased Internet usage by the general population during the period greatly expanded the accessibility and ease of purchase of stock in publicly held companies; the overall value of these stocks also increased markedly. Both factors could have contributed to the increase in the proportion of stock in the portfolios of wealthy individuals between 1995 and 1998.

Portfolio composition varied substantially by sex and wealth class among America's top wealth holders in 1998. Compared to those in higher net worth groups, individuals with less than \$1 million in net worth devoted a larger percentage of their portfolio to personal residences, investment real estate, and retirement assets. In contrast, top wealth holders with more than \$10 million in net worth, dedicated more of their portfolio to closely held stock than less wealthy investors [9]. Women's portfolios contained a greater proportion of stock in public corporations than those of men, while stock in closely held corporations made up a larger share in the portfolios of male top wealth holders.

Investment real estate, combined with the value of personal residences, dominated the portfolio of men with a net worth less than \$1 million in 1998, accounting for 33.3 percent of total assets. Investments in publicly traded stock made up the second largest share of their portfolio, 15.8 percent, a 71.1-

percent increase over the portfolio share devoted to publicly traded stock by male wealth holders in this wealth class in 1995 (see Figure B). Male top wealth holders with between \$1 million and \$10 million in net worth in 1998 held a significantly different portfolio compared to their 1995 counterparts, as shown by Figure C. Investment real estate was the largest asset for individuals in this wealth bracket in 1995. However, in 1998, publicly traded stock was the dominant asset, accounting for 22.6 percent of the aggregate portfolio. Conversely, the portfolios of male top wealth holders with a net worth of \$10 million or more were allocated similarly in both 1995 and 1998 (see Figure D). In both years, the most dominant assets for men in this net worth category were closely held and publicly traded stocks, although both made up slightly smaller portions of the portfolio in 1998. The largest distinction between the two periods for males in the highest net worth category was the portfolio share held in cash or money market accounts; in 1998, male top wealth holders held more of their portfolio in the form of cash and money market accounts than those in the earlier period.

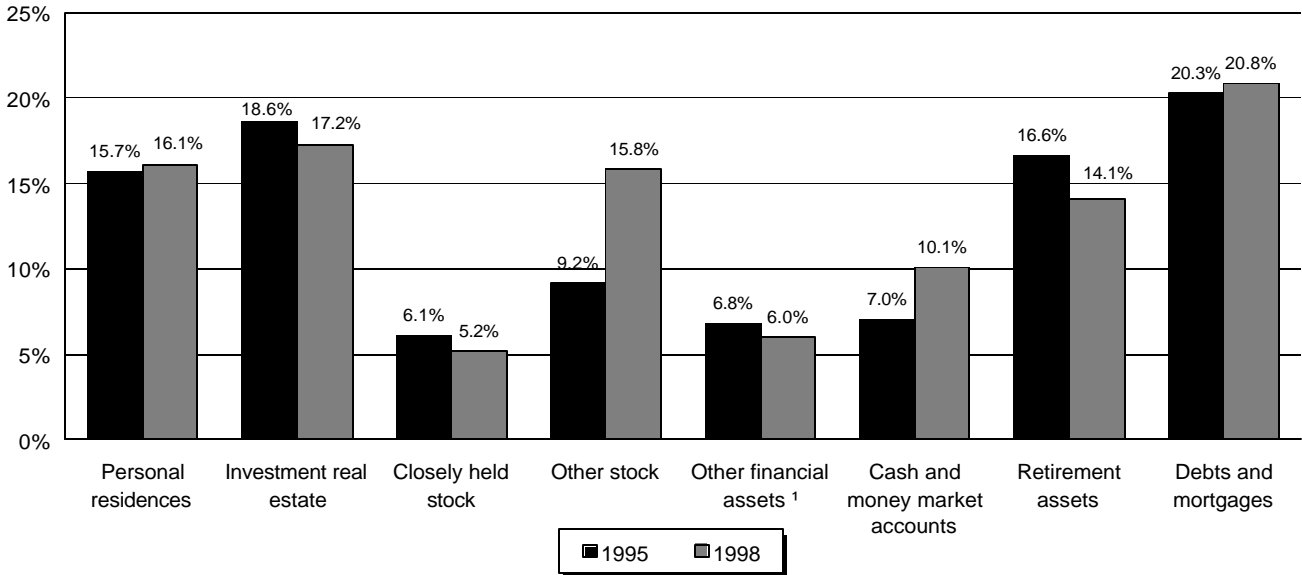
The portfolios held by female top wealth holders in 1998 differed significantly from those of similar women in 1995. Figure E shows that the portfolio of female top wealth holders with a net worth of less than \$1 million in 1998 contained significantly less investment real estate and vastly more publicly traded stock than the portfolio of their 1995 counterparts. A similar difference between the two periods can be observed for female top wealth holders with net worth between \$1 and \$10 million, as publicly traded stock replaced real estate investments (including the value of personal residences) as the major asset in the portfolio for 1998, with stock accounting for 30.7 percent of the total (see Figure F). Figure G shows the dramatic differences between the portfolios of females with a net worth of \$10 million or more in 1995 and 1998. Women in the top wealth bracket in 1998 dedicated 8.0 percent more of their portfolio to publicly traded stock than their 1995 counterparts. Significantly, investments in closely held stock by this wealthiest group of women increased from 13.5 percent of the portfolio in 1995 to 20.2 percent in 1998, reflecting the increasing role of female entrepreneurs in the U.S. economy. In fact, the two most prevalent assets in 1998, publicly traded stock and closely held stock, when combined, composed more

Personal Wealth, 1998

Figure B

Male Top Wealth Holders with Net Worth of Less Than \$1 Million: Selected Assets and Debts as a Percentage of Total Assets, by Year

Percentage

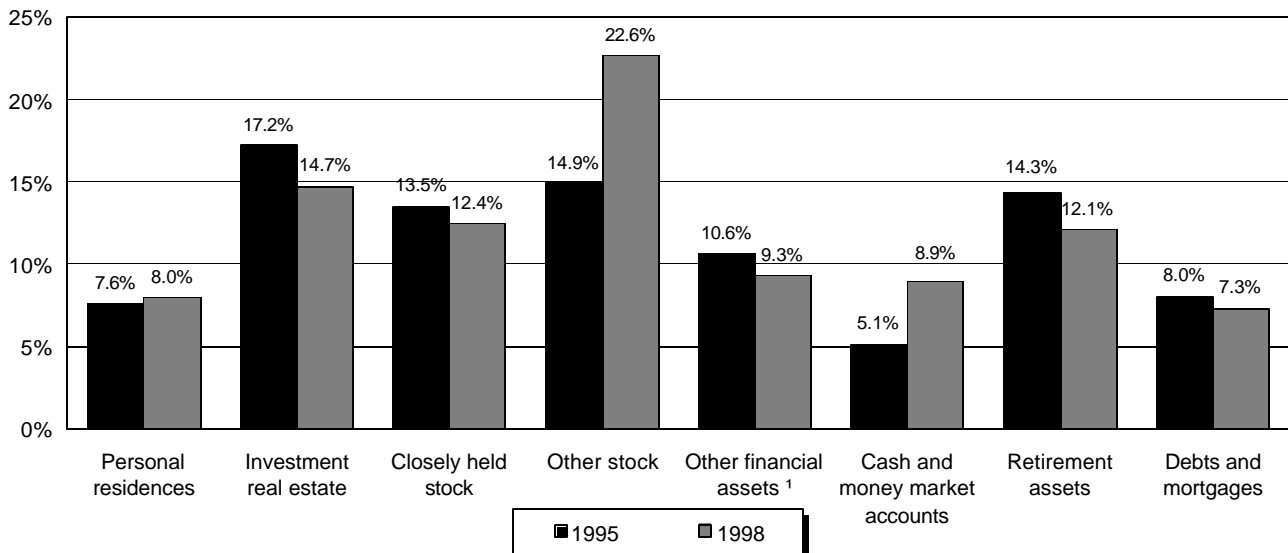


¹ Includes Federal, corporate, and tax-exempt bonds, as well as mixed portfolio mutual funds.

Figure C

Male Top Wealth Holders with Net Worth of Between \$1 Million and \$10 Million: Selected Assets and Debts as a Percentage of Total Assets, by Year

Percentage



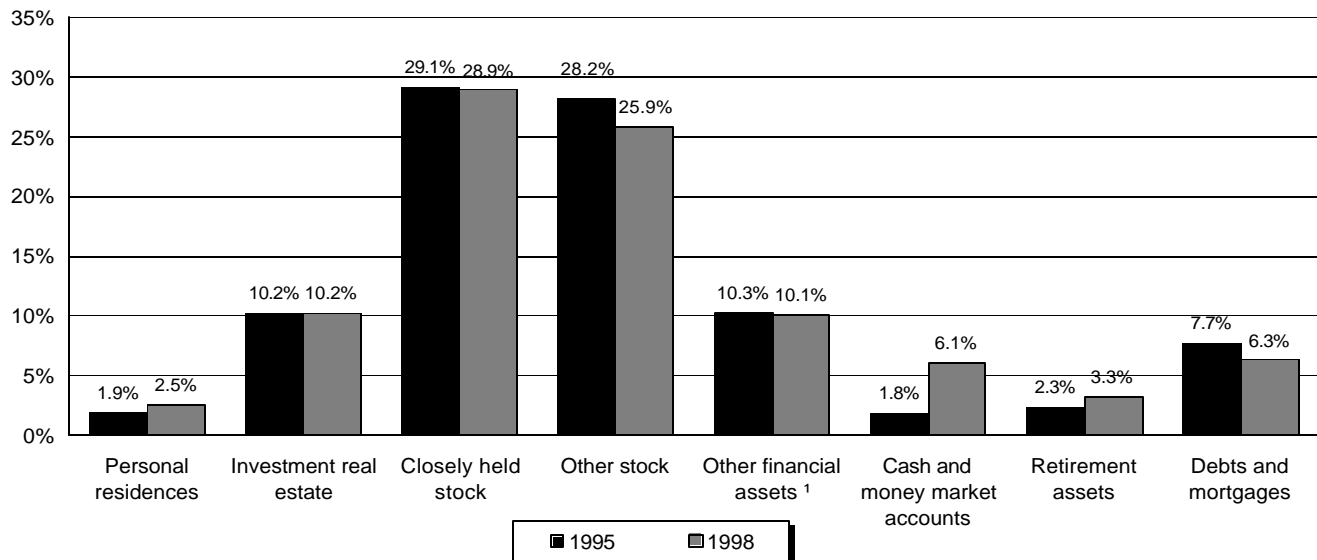
¹ Includes Federal, corporate, and tax-exempt bonds, as well as mixed portfolio mutual funds.

Personal Wealth, 1998

Figure D

Male Top Wealth Holders with Net Worth of \$10 Million or More: Selected Assets and Debts as a Percentage of Total Assets, by Year

Percentage

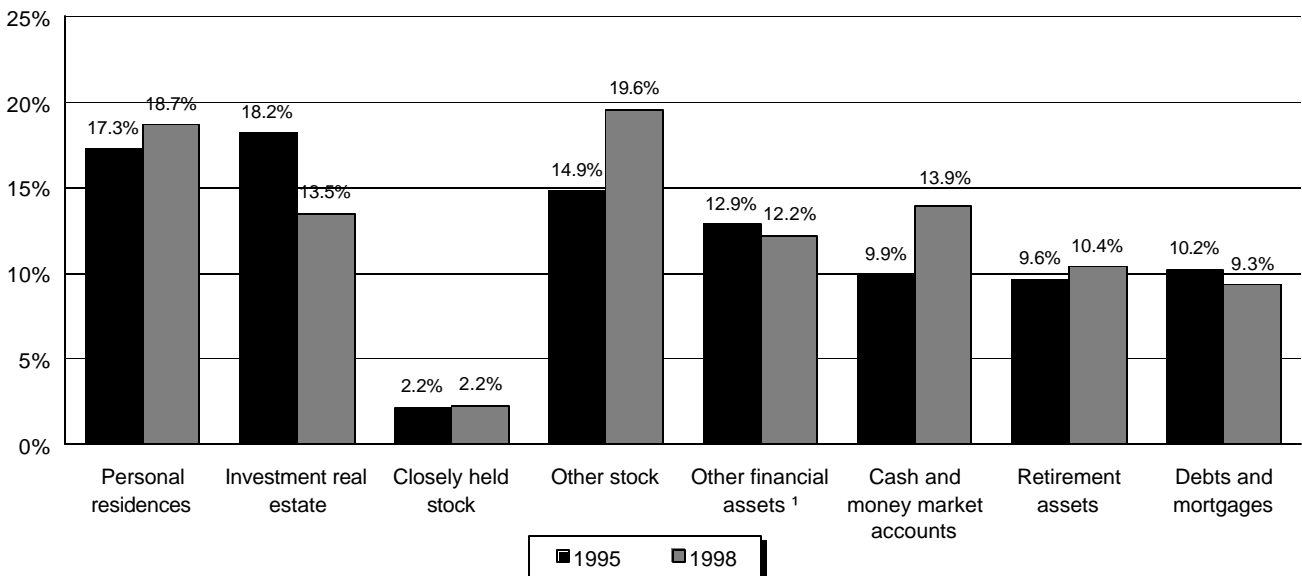


¹ Includes Federal, corporate, and tax-exempt bonds, as well as mixed portfolio mutual funds.

Figure E

Female Top Wealth Holders with Net Worth of Less Than \$1 Million: Selected Assets and Debts as a Percentage of Total Assets, by Year

Percentage



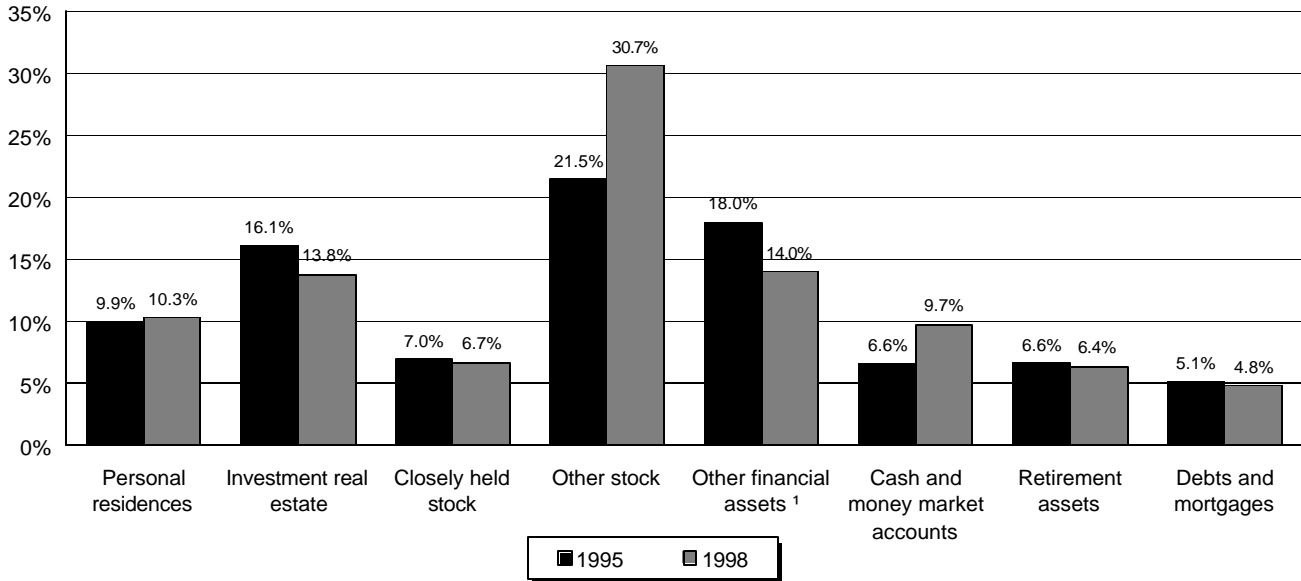
¹ Includes Federal, corporate, and tax-exempt bonds, as well as mixed portfolio mutual funds.

Personal Wealth, 1998

Figure F

Female Top Wealth Holders with Net Worth of Between \$1 Million and \$10 Million: Selected Assets and Debts as a Percentage of Total Assets, by Year

Percentage

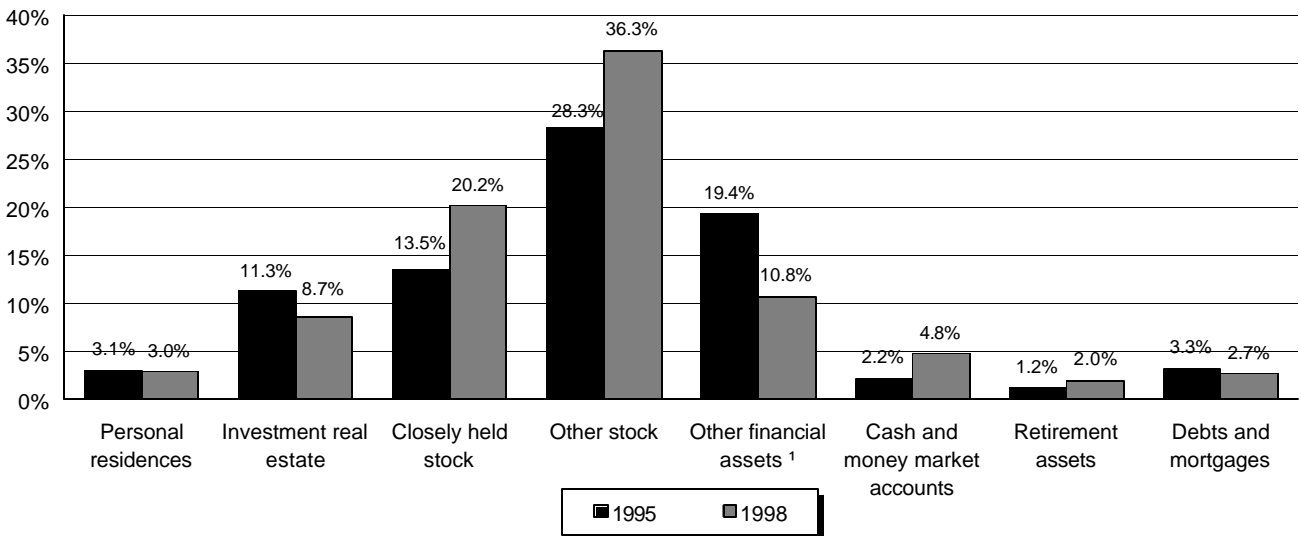


¹ Includes Federal, corporate, and tax-exempt bonds, as well as mixed portfolio mutual funds.

Figure G

Female Top Wealth Holders with Net Worth of \$10 Million or More: Selected Assets and Debts as a Percentage of Total Assets, by Year

Percentage



¹ Includes Federal, corporate, and tax-exempt bonds, as well as mixed portfolio mutual funds.

Personal Wealth, 1998

than half of the portfolio value for women with \$10 million or more in net worth.

Age

In general, personal investment goals tend to change as one ages. Younger investors are usually interested in asset growth opportunities and are often willing to accept higher levels of risk than older investors, who may be more focused on reliable income sources and who tend to prefer investments that are eligible for preferential income tax treatment. In 1998, the value of investment real estate and investments in closely held corporations made up smaller percentages in the portfolios of older top wealth holders than in portfolios held by younger individuals in the same wealth classes, while the portfolios of younger investors included smaller percentages of Government-issued bonds than those of older investors. Publicly traded stock was the dominant asset in the portfolios of wealth holders in every age group and for both genders in 1998. Figure H shows that, in 1998, men under the age of 50 held almost twice as much of their portfolio in the stock of publicly traded corporations compared to

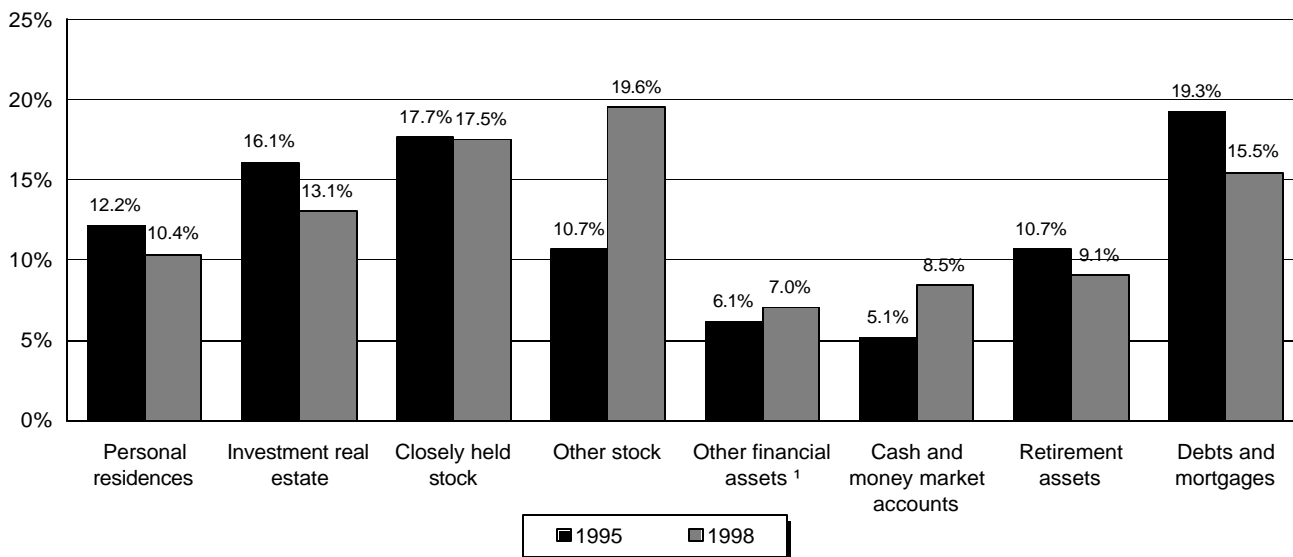
males in this age group in 1995. In 1998, the second most prevalent asset held by these relatively young males was stock in closely held corporations, which made up 17.5 percent of the overall portfolio value. Similarly, while 1995 male top wealth holders between the ages of 50 and 65 had invested predominantly in investment real estate (18.2 percent), publicly traded stocks dominated the portfolio of males in this age bracket in 1998, making up 19.4 percent of the total. For males age 65 and older in both 1995 and 1998, investments in publicly traded stock accounted for the largest share of the portfolio; however, the shares made up of both real estate investments and closely held stock were smaller than for younger males. Figure J illustrates that other financial assets, primarily tax-exempt bonds issued by State and local governments, made up the second largest percentage of the portfolio for male top wealth holders age 65 and older in both 1995 and 1998. These bonds are a low risk, stable source of income that is exempt from Federal, and in some cases State, income tax.

The portfolio of female top wealth holders under the age of 50 held significantly more publicly traded

Figure H

Male Top Wealth Holders under Age 50: Selected Assets and Debts as a Percentage of Total Assets, by Year

Percentage

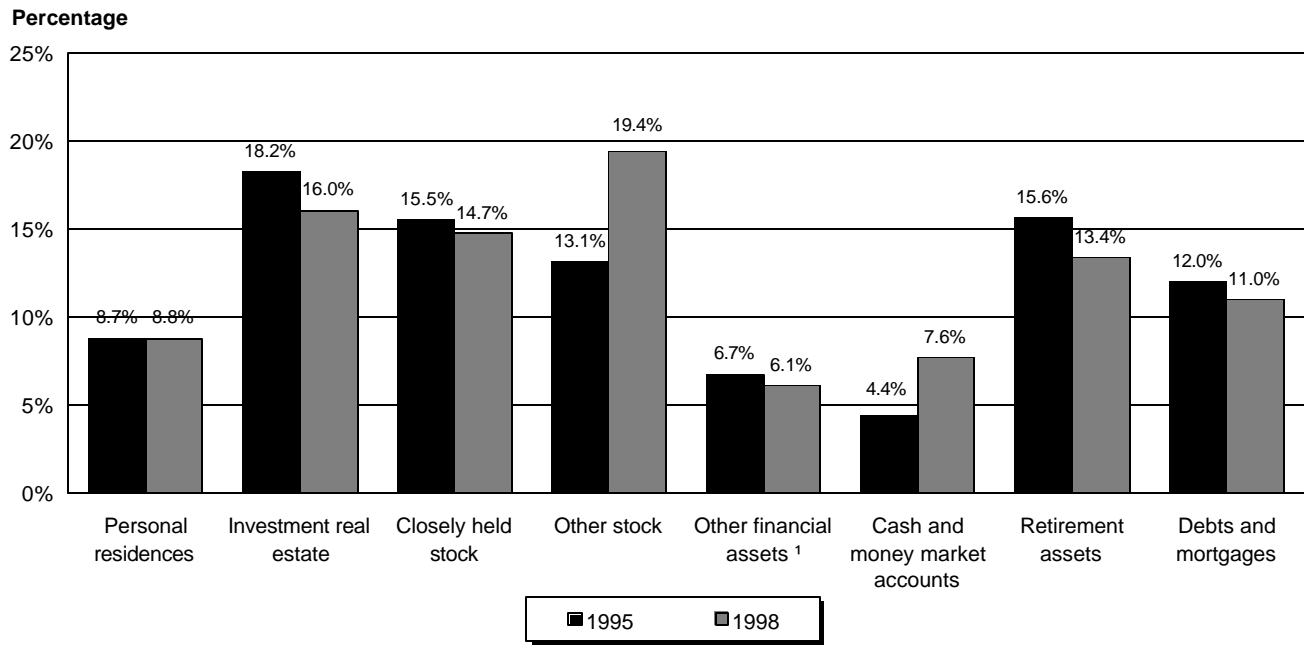


¹ Includes Federal, corporate, and tax-exempt bonds, as well as mixed portfolio mutual funds.

Personal Wealth, 1998

Figure I

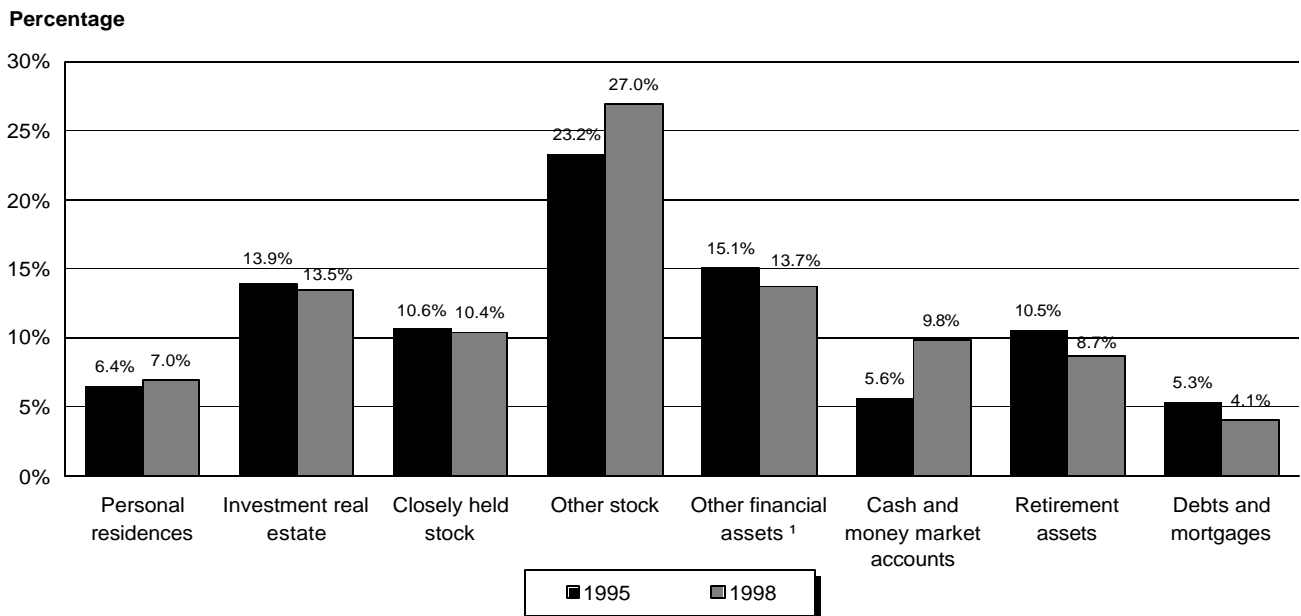
Male Top Wealth Holders Age 50 Under 65: Selected Assets and Debts as a Percentage of Total Assets, by Year



¹ Includes Federal, corporate, and tax-exempt bonds, as well as mixed portfolio mutual funds.

Figure J

Male Top Wealth Holders Age 65 and Older: Selected Assets and Debts as a Percentage of Total Assets, by Year



¹ Includes Federal, corporate, and tax-exempt bonds, as well as mixed portfolio mutual funds.

Personal Wealth, 1998

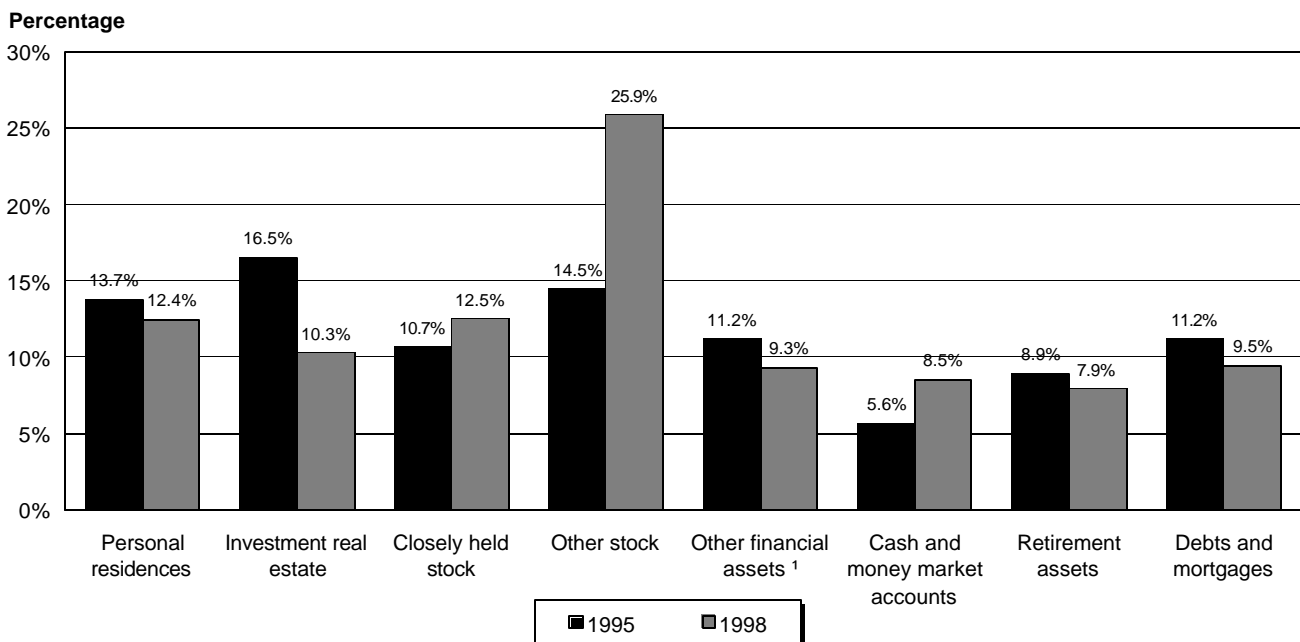
stock in 1998 than in 1995, making publicly traded stock the largest asset in the 1998 portfolio (see Figure K). Closely held stock and personal residences were other major assets in the portfolio held by relatively young women, making up 12.5 percent and 12.4 percent of the total, respectively, in 1998. Likewise, while the dominant portfolio asset in 1995 for women in the 50 under 65 age group was investment real estate, publicly traded stock was the largest portfolio asset in 1998 (see Figure L). Investment real estate ranked second among investment assets, composing 17.2 percent of the portfolio in 1998. Figure M shows that publicly traded stocks made up more than one third of the portfolio of female top wealth holders age 65 and older in 1998, by far the largest share contributed by a single asset type in the portfolios held by men or women in any age bracket. Similar to males over the age of 65, other financial assets, primarily tax-exempt bonds issued by State or local governments, were ranked second in the portfolio, making up 17.6 percent of the portfolio for females in this oldest age group. Investments in closely

held stock accounted for the smallest portfolio share among the assets shown in Figure M.

While there were clear differences in the investment choices made by individuals based on both sex and age, the skewed nature of the distribution of wealth makes it more difficult to discern a similar relationship among sex, age, and an individual's overall level of wealth. Some economic theory predicts that individuals save over their working lifetime and then consume out of those savings after retirement [10]. There are a number of refinements to this theory that suggest the very wealthy may have a number of additional motivations for saving, such as the desire to provide bequests at death, which might mean that wealth accumulation could continue well beyond retirement age. Figure N shows that average net worth clearly increased with age for male top wealth holders. Men under the age of 50 had an average net worth of almost \$1.2 million, while the average for males age 85 and older was nearly \$2.5 million, more than double that of the youngest group. For highly skewed distributions, however, the median

Figure K

Female Top Wealth Holders Under Age 50: Selected Assets and Debts as a Percentage of Total Assets, by Year

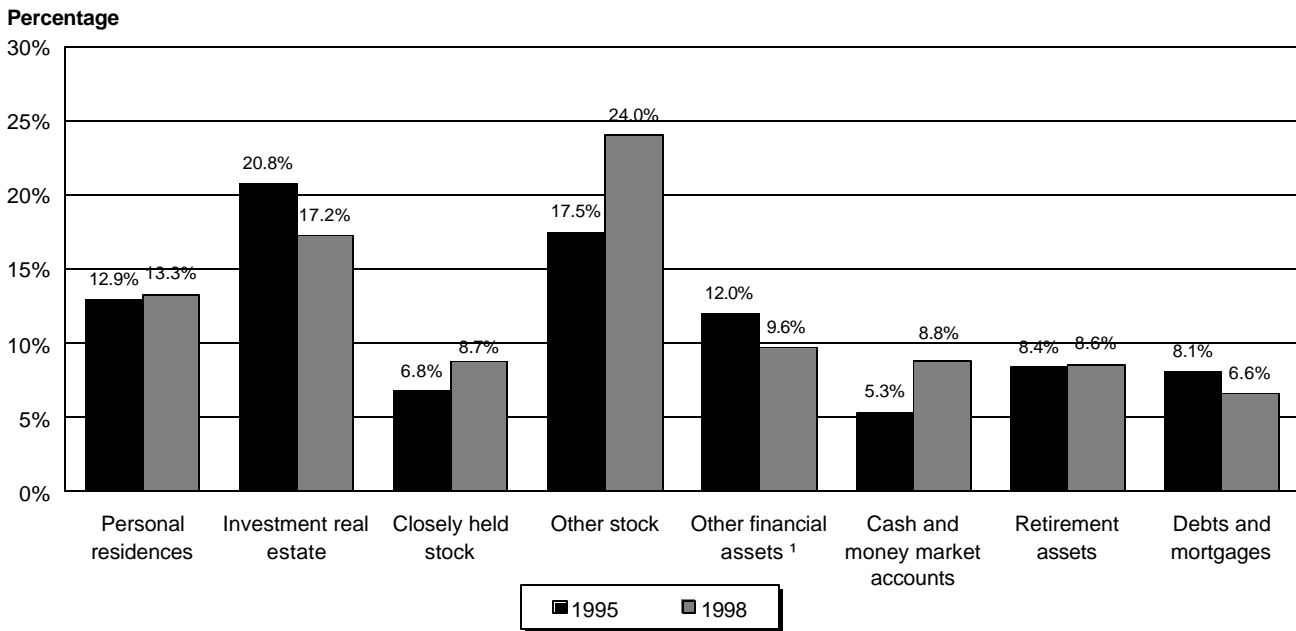


¹ Includes Federal, corporate, and tax-exempt bonds, as well as mixed portfolio mutual funds.

Personal Wealth, 1998

Figure L

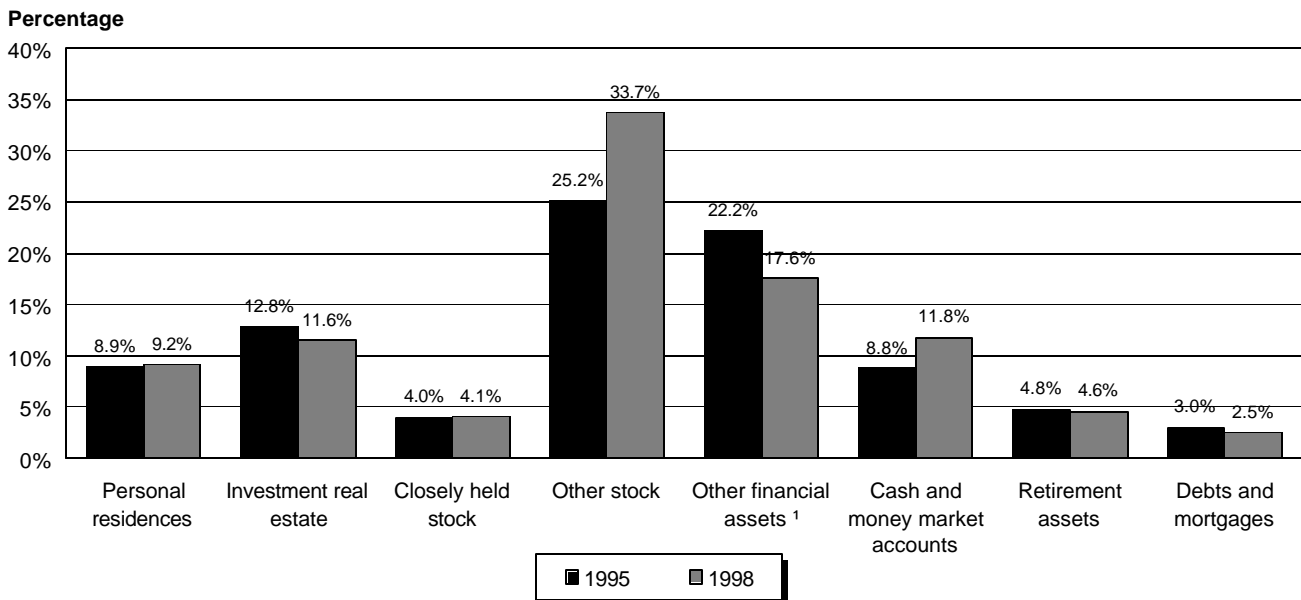
Female Top Wealth Holders Age 50 Under 65: Selected Assets and Debts as a Percentage of Total Assets, by Year



¹ Includes Federal, corporate, and tax-exempt bonds, as well as mixed portfolio mutual funds.

Figure M

Female Top Wealth Holders Age 65 and Older: Selected Assets and Debts as a Percentage of Total Assets, by Year



¹ Includes Federal, corporate, and tax-exempt bonds, as well as mixed portfolio mutual funds.

Personal Wealth, 1998

is often a much better summary measure than the average since the median is less affected by large outliers in a population. For young, wealthy males, the median net worth was \$654,800. Figure N shows that, while the median value of net worth was higher for males age 50 and older, the median was about the same for men in each of the over 50 age groups depicted in the graph, approximately \$1.0 million.

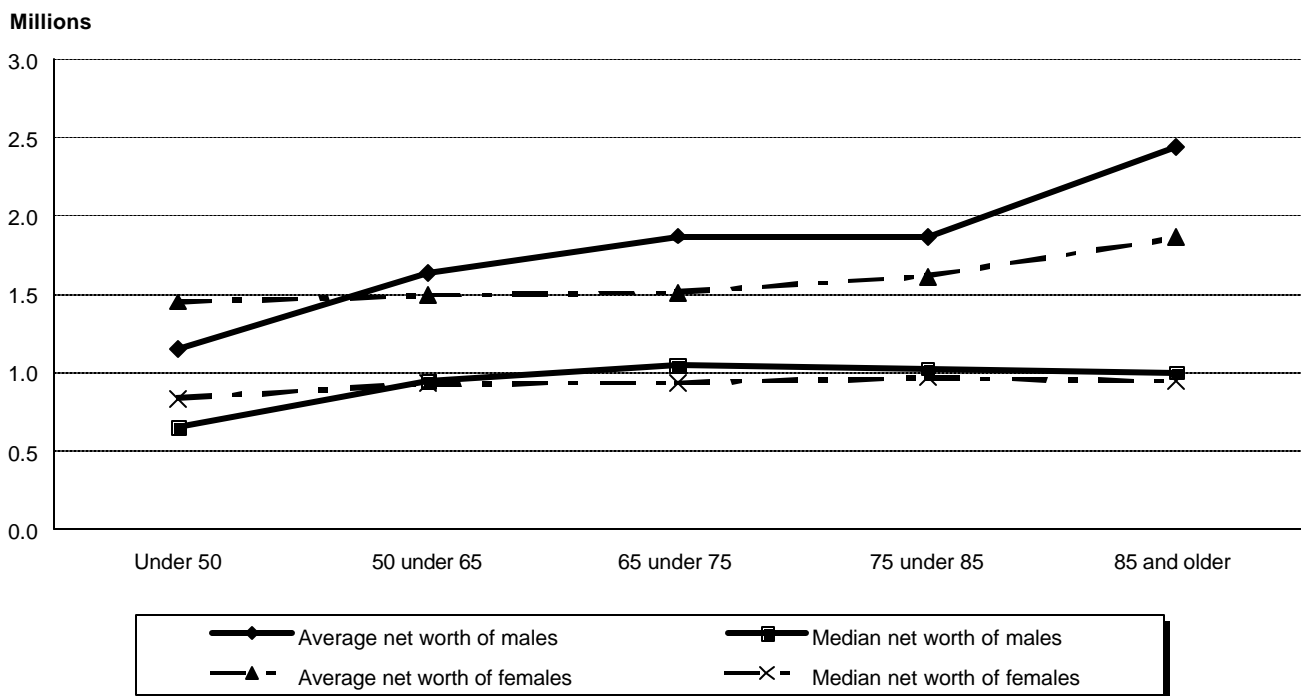
The average net worth for females under the age of 50 was almost \$1.5 million, higher than that of males in the same age group. Unlike their male counterparts, however, the average was nearly the same for females in both the 50 under 65 and 65 under 75 age groups. For women over age 75, average net worth was higher, more than \$1.6 million for women in the 75 under 85 age group and almost \$1.9 million for women age 85 and older. The median value of net worth for women, however, was almost the same for all age groups. For women under the age of 50, the median was \$835,400. For all other age groups, the median was approximately \$950,000.

StateData

Figure O details the States with the largest numbers of resident millionaires [11]. California, the most populous State in America in 1998, had the largest number of residents with a net worth of \$1 million or more, 412,000 millionaires [12]. New York and Florida had the second and third largest number of resident millionaires, 243,000 and 206,000, respectively. Overall, the number of millionaires in most States in 1998 was almost double that recorded in 1995, despite substantially smaller changes in the overall adult population and in inflation, which was only about 7.0 percent for the 3-year period [13]. For example, the number of California residents with a net worth of \$1 million or more increased 80.7 percent, having numbered 228,000 in 1995, while the State adult population increased by 4.2 percent between 1995 and 1998. Similarly, the number of resident millionaires in Texas grew dramatically from 76,000 in 1995 to 157,000 in 1998 despite an increase in the State adult population of only 6.1 percent. Massachusetts' adult population increased by only

Figure N

All Top Wealth Holders: Average and Median Net Worth, by Sex and Age, 1998



Personal Wealth, 1998

Figure O

States with the Largest Number or Highest Concentration of Resident Millionaires, 1998 ¹

[Numbers are in thousands]

State	Number of millionaires	Total State population	Millionaires as a percentage of State population
	(1)	(2)	(3)
California.....	412	23,756	1.7
New York.....	243	13,673	1.8
Florida.....	206	11,376	1.8
Texas.....	156	14,131	1.1
Illinois.....	146	8,857	1.6
Pennsylvania.....	122	9,141	1.3
New Jersey.....	116	6,125	1.9
Ohio.....	85	8,365	1.0
Massachusetts.....	81	4,690	1.7
Connecticut.....	65	2,484	2.6
Colorado.....	56	2,930	1.9
District of Columbia.....	8	420	1.9

¹ Millionaires are defined as individuals with net worth of \$1 million or more.

1.0 percent from 1995 to 1998; yet the number of residents with \$1 million or more of net worth increased by 125.0 percent.

Looking at the number of millionaires on a per capita basis, that is, the number of millionaires per thousand residents, eliminates the distortions caused

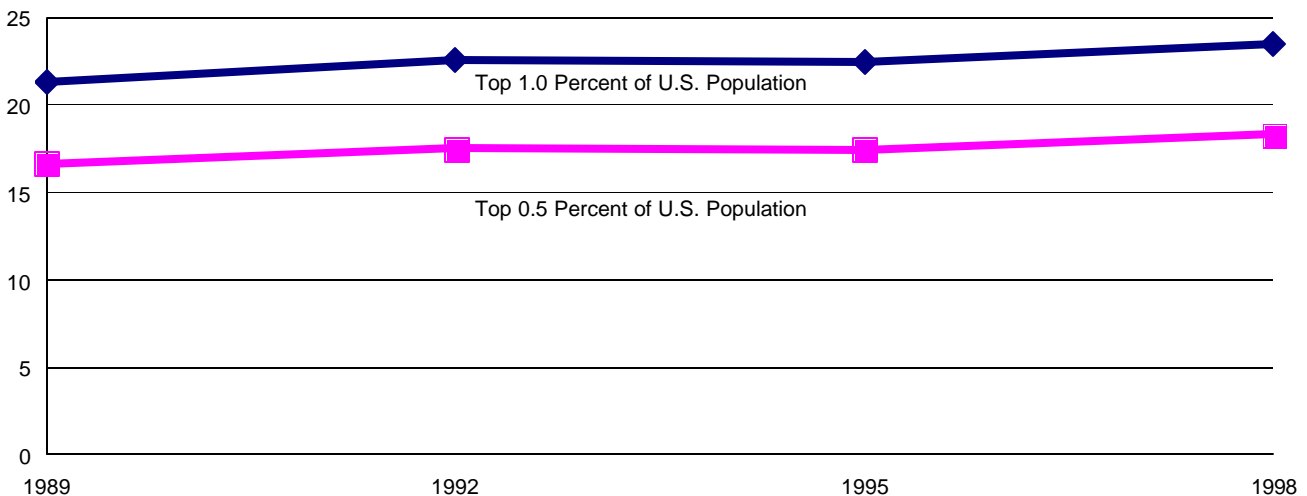
by the large adult populations in some States and, thereby, presents a somewhat different picture of the geographic distribution of wealth in the United States. Connecticut, ranked the 27th largest state by size of population, had the greatest concentration of millionaires, with more than 2.6 percent of the residents having \$1 million or more in net worth. With an approximate population of 2.9 million and 56,000 residents with a net worth of \$1 million or more, Colorado had the second highest density of millionaires, 1.9 percent. The District of Columbia, with a population of 420,000, was ranked third with about 1,900 millionaires per 100,000 residents. The States with the largest number of millionaires--Florida, New York, and California--were fifth, seventh, and eighth, respectively, in the per capita ranking.

Concentration Estimates

The distribution of wealth in the United States is highly skewed, with a relatively small group of individuals owning a large percentage of the total net worth. Longitudinal changes in distribution of wealth in the U.S. can be observed by examining the share of U.S. wealth, measured in terms of net worth, held by a constant percentage of the population. Figure P reports the percentages of total U.S. wealth held by

Figure P

Percentage of Total U.S. Net Worth Held by the Top 1.0 Percent and Top 0.5 Percent of the U.S. Population, 1989-1998



Personal Wealth, 1998

the top 1.0 percent and the top 0.5 percent of the population, 1989-1998 [14, 15]. In 1998, 1.0 percent of the U.S. adult population corresponded with 1.9 million individuals. These individuals owned approximately 23.5 percent of total U.S. individual wealth, a 1.0-percent increase over the share owned by this subpopulation in 1995 and a 2.0-percent increase since 1989, when the top 1.0 percent of the population owned more than 21.3 percent of U.S. wealth. A similar pattern was evident in the share of wealth held by the 963,000 individuals who made up the top 0.5 percent of the U.S. adult population in 1998. They held about 18.3 percent of the Nation's net worth in 1998, up from about 17.4 percent in 1995 and 16.6 percent in 1989. These slight changes in the concentration may indicate that the real wealth of the Nation's top wealth holders grew at a slightly higher rate than that of the overall adult population. However, the sampling error associated with these estimates is large, meaning that most of the inter-period differences may not be statistically significant.

Summary

There were more than 6.5 million individuals in the United States with gross assets of \$625,000 or more in 1998. These individuals represented about 3.4 percent of the total U.S. adult population. As a group, top wealth holders owned more than \$11.1 trillion in total assets, or 32.6 percent of total U.S. personal asset holdings. Almost 4.0 million, or 61.2 percent, of these wealthy individuals were male, and 2.5 million were female. This strongly contrasted with the gender distribution of the total U.S. population in 1998, which contained only 48.0 percent men. Male top wealth holders were more likely to be married than men in the overall U.S. population, while the opposite was true for female top wealth holders, who were less likely to be married than their counterparts in the U.S. population.

Both the age and relative wealth of top wealth holders impacted the composition of their portfolios. Women's portfolios contained a greater proportion of stock in public corporations than those of men. The value of the personal residence and investments in closely held corporations made up smaller percentages in the portfolios of older top wealth holders than in portfolios held by younger individuals in the same wealth classes. Individuals with \$1 million or less in

net worth devoted a larger percentage of their portfolio to personal residences, investment real estate, and retirement assets than those in higher net worth groups. Top wealth holders with more than \$10 million in net worth dedicated more of their portfolio to closely held stock in 1998 than less wealthy investors. Overall, 1998 top wealth holders invested in more publicly traded stock and cash and money market accounts than similar individuals in 1995, and they invested less in other financial assets (including Federal, corporate, and tax-exempt bonds, as well as mixed portfolio mutual funds) and investment real estate.

There was a significant increase in the number of U.S. citizens with net worth of \$1.0 million or more between 1995 and 1998. Overall, the number of millionaires per State in 1998 was almost double that recorded in 1995 despite substantially smaller changes in State adult populations and low inflation over the 3-year period. California remained the State with the largest number of millionaires, while Connecticut was the State with the greatest per capita concentration of millionaires. Estimates of the amount of wealth held by the top 1.0 percent and 0.5 percent of the U.S. population suggest that the percentage of overall U.S. wealth held by these groups increased slightly between 1995 and 1998.

Appendix: The Estate Multiplier Technique

The estate multiplier technique assumes that estate tax returns, taken as a whole, represent a random sample of the living wealthy population and thus provide a means of producing reasonable estimates of personal wealth. The multiplier is equivalent to a sampling weight where the probabilities of selection include the probability of being a decedent and also that of being included in the Statistics of Income sample of estate tax returns. The more difficult computation is determining the probability of being a decedent. Mortality rates for the general population, by age and sex, available from the National Center for Health Statistics, provide the basis for the estimates. However, there is much evidence that the wealthy have mortality rates significantly lower than those of the entire population. The following sections describe the sampling criteria used to select the underlying estate tax returns, as well as efforts to develop mortality rates appropriate for this elite segment of the population.

Estate Tax Return Sample Design

The Statistics of Income Division collects data from an annual sample of Federal estate tax returns that are used primarily for policy and budget purposes. The sample follows a 3-year cycle that is designed mainly to accommodate year-of-death estimates, with each study concentrating on decedents who died in the first year, the focus year, of the 3-year cycle. The annual samples are also adequate for producing filing-year estimates. Year-of-death estimates are desirable, because filing extensions and other filing delays mean that returns filed in any given calendar year may represent decedents who died in many different years. Thus, estate tax return data for a single filing year may reflect different economic and tax law conditions. By concentrating on a single year of death, these limitations can be overcome, making it possible to study the data in the context of a single time period.

Returns are selected using a stratified random sample with three stratifying variables. Since 1982, the stratifying variables have been year of death (focus year versus non-focus years), total gross estate, and age at death. Gross estate is divided into five categories: \$625,000 under \$1 million, \$1 million under \$2.5 million, \$2.5 million under \$5 million, \$5 million under \$10 million, and \$10 million or more. Age at death is divided into five categories: under 40, 40 under 50, 50 under 65, 65 under 75, and 75 and older. Sample rates vary from 3 percent to 100 percent, with over half the strata selected with certainty, i.e., at the 100-percent rate.

SOI has combined Federal estate tax returns filed over 3-year periods to produce the estimates of wealth for 1998 presented here. One of the strengths of the estate multiplier technique is the large sample on which the estimates are based. The 1998 sample includes more than 26,000 returns [16].

Mortality Differentials

Research has proven that individuals who are economically or socially better off generally live longer and are healthier than individuals in the general population. Therefore, it is important to determine a mortality rate appropriate to the wealthy decedents in the estate tax return sample. If mortality and wealth are correlated, then biased estimates will result using mortality rates unadjusted for wealth level. Evidence suggests that there is an inverse relationship between

these factors, meaning that unadjusted multipliers would be too low and, thus, undervalue wealth [17].

There have been a considerable number of attempts to quantify differences between the mortality of the general population and that of the very wealthy, looking at factors such as education, income, and occupation. For the data presented in this article, the National Longitudinal Mortality Study (NLMS), produced by the National Institutes of Health, was used to estimate the magnitude of this difference, hereafter called the "mortality differential" [18]. The NLMS is a random sample of 1.3 million Americans of all ages, races, and sexes, in the civilian, non-institutionalized population. The sample was drawn mainly from the Census Bureau's Current Population Survey. Interviews, done by telephone, achieved a 96-percent response rate. Respondents were at least 14 years of age.

Because the NLMS did not contain information on a respondent's wealth, income and occupation were used to identify survey respondents with characteristics similar to estate tax decedents. Mortality rates, by age and sex, were calculated for NLMS decedents whose incomes and occupations were similar to the incomes and occupations of estate tax decedents. Mortality rates, by age and sex, were also calculated for all individuals in the NLMS sample. A simple ratio of these two rates was used to construct mortality differentials. National mortality rates, published by the National Center for Health Statistics, were then multiplied by the differentials to obtain mortality rates appropriate for wealthy decedents [19].

The differences between the mortality rates of the general population and those of individuals with characteristics similar to the estate tax decedent population, captured in the magnitude of the mortality rate differentials, were most pronounced for young decedents; these differences disappeared entirely by age 85. For example, the mortality rate for a wealthy male under the age of 40 was about half that of a male in the general population. However, for males over 85 years of age, the mortality rates were the same for both groups. Wealth seems to have had a much smaller effect on the mortality rates of females in the NLMS sample than it had on the mortality of males in that sample. The mortality rate for wealthy females under age 40 was approximately 89.0 percent of that for females in the general population.

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For females over 85 years of age, the mortality rates were the same for both groups.

Multipliers

The multipliers (or sample weights) were calculated as follows:

$MULT = 1 / (p \cdot r \cdot d)$ where:

p = probability of selection to the estate tax sample,

r = mortality rate,

d = rate differential.

The multipliers ranged from 2 to 18,000, with an average of about 250. Some additional smoothing of the multipliers was employed to constrain both tails of the net worth distribution [20].

Notes and References

- [1] See Menchik, Paul (1991), "Economic Status as a Determinant of Mortality Among Nonwhite and White Older Males: or, Does Poverty Kill?," Institute for Research on Poverty, Discussion Paper Number 93891.
- [2] Scheuren, Fritz (1994), "Historical Perspectives on IRS Wealth Estimates With a View to Improvements," *Compendium of Federal Estate Tax Data and Personal Wealth Studies*, Department of the Treasury, IRS Publication 1773, p. 358.
- [3] Eller, Martha Britton (2001), "Audit Revaluation of Federal Estate Tax Returns," *Internal Revenue Service Statistics of Income Bulletin*, Winter 2000-2001, Washington, DC.
- [4] Wherever possible, the value of minority discounts was added back to the individual asset values used in these estimates. However, inconsistencies in the way that these discounts are reported on Form 706 limit SOI's ability to collect these data. Therefore, it is likely that the estimates presented here are still somewhat undervalued.
- [5] Estimates of the equity value of life insurance included in total assets were approximated, based on the face value reported on Federal estate tax returns and on the decedent's age. A ratio of the equity value to the face value was developed, using data from wealthy respondents to the 1989, 1992, and 1995 Board of Governors of the Federal Reserve System's Surveys of Consumer Finances (SCF). A simple regression was used to predict the values used in the Statistics of Income estimates. The same set of ratios was used for both males and females, due to a lack of sex-specific data in the SCF.
- [6] Estimates of both the total assets and net worth of the United States are from household estimates derived from the Board of Governors of the Federal Reserve System's Survey of Consumer Finances (SCF), found in Kennickell, Arthur, B. (2000), "An Examination of Changes in the Distribution of Wealth from 1989 to 1998: Evidence from the Survey of Consumer Finances," Board of Governors of the Federal Reserve System working paper, p. 19.
- [7] Marital status estimates for the general population, by sex, were obtained from the U.S. Census Bureau, *Current Population Reports*, pp. 20-514.
- [8] Estimates of personal wealth for 1995 can be found in Johnson, Barry W., "Personal Wealth 1995," *Internal Revenue Service Statistics of Income Bulletin*, Winter 1999-2000, Washington, DC pp. 59-84.
- [9] Closely held stock is stock in a corporation that is not publicly traded, usually that of a small, family-owned corporation.
- [10] See Modigliani, Franko (1986), "Life Cycle, Individual Thrift, and the Wealth of Nations," *American Economic Review*, Vol. 68, pp. 547-560.
- [11] While the size of the underlying sample of estate tax returns makes estimates of wealth, derived using the estate multiplier technique, fairly robust, estimates of wealth by State can be subject to significant year-to-year fluctuations for States with relatively small decedent populations. This is especially true for individuals at the extreme tail of the net worth distribution. For this reason, Table 6 is limited to individuals with net worth of \$20 million or less.
- [12] U.S. population data obtained from the U.S. Bureau of the Census (1999), "Population Estimates for the U.S., Regions, Divisions, and

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States by 5-year Age Groups and Sex: Annual Time Series Estimates, July 1, 1990 to July 1, 1998.”

- [13] Consumer Price Index (2002), U.S. City Average for All Items, U.S. Department of Labor, Bureau of Labor Statistics, Washington, D.C.
- [14] Estimates of the U.S. adult population obtained from U.S. Bureau of the Census, press release CB96-88, also published in U.S. Bureau of the Census, *Statistical Abstract of the United States: 2000 (120th edition*, Washington, DC, Table 13.
- [15] For estimates of U.S. net worth for 1989, 1992, 1995 and 1998, see Kennickell, Arthur, B., pp. 16-19.
- [16] Although the overall sample of estate tax returns is large, the number of decedents who were young (less than 40) or extremely wealthy (gross assets of \$5 million or more) in any given year varies considerably and is small in comparison to their number in the living population. Because of this, the resulting estimates of wealth for these two categories of living individuals would be subject to significant fluctuations from period to period. To reduce this variance, the sample is “smoothed” by including *all* returns for young or wealthy decedents filed during the 3-year sample period without regard to the decedent's year of death.

These segments of the sample are then post-stratified and reweighted to represent the true decedent population for the year of interest. This technique reduces the effect of outliers on estimates of personal wealth.

- [17] Smith, James (1994), “Estimating the Wealth of Top Wealth-Holders from Estate Tax Returns,” *Compendium of Federal Estate Tax Data and Personal Wealth Studies*, Department of Treasury, IRS Publication 1773, p. 336.
 - [18] A more detailed description of this study is found in *A Mortality Study of 1.3. Million Persons by Demographic, Social, and Economic Factors: 1979-1985 Follow-up 1992 (1992)*, U.S. National Longitudinal Mortality Study, National Institutes of Health, National Heart, Lung, and Blood Institute, NIH Publication Number 92-3297.
 - [19] Mortality data for 1998 were obtained from the National Center for Health Statistics, Division of Vital Statistics as reported in the *National Vital Statistics Reports*, Volume 48, Number 11, July 24, 2000.
 - [20] For a more complete methodological discussion, see Johnson, Barry W., “Updating Techniques for Estimating Wealth from Federal Estate Tax Returns,” *1997 Proceedings of the American Statistical Association, Section on Business and Economic Statistics*.
- SOURCE: IRS, Statistics of Income Bulletin, Winter 2002-2003, Publication 1136 (Rev. 4-2003).

Personal Wealth, 1998

Table 1.--Personal Wealth, 1998: Type of Property by Size of Net Worth

[All figures are estimates based on samples--numbers are in thousands, money amounts are in millions of dollars]

Size of net worth	Total assets		Debts and mortgages		Net worth		Personal residence	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Total.....	6,530	11,142,788	5,020	957,211	6,530	10,185,577	4,771	1,080,043
Size of net worth:								
Negative net worth.....	39	36,353	39	90,087	39	-53,734	22	4,932
\$1 under \$600,000.....	1,253	671,387	1,105	195,383	1,253	476,004	964	158,492
\$600,000 under \$1,000,000.....	2,494	2,110,572	1,784	172,173	2,494	1,938,399	1,764	319,302
\$1,000,000 under \$2,500,000.....	2,058	3,289,005	1,529	222,324	2,058	3,066,681	1,508	351,952
\$2,500,000 under \$5,000,000.....	440	1,569,754	357	89,762	440	1,479,991	325	119,490
\$5,000,000 under \$10,000,000.....	166	1,196,100	138	70,470	166	1,125,630	126	65,479
\$10,000,000 under \$20,000,000.....	51	742,956	42	39,731	51	703,225	38	31,886
\$20,000,000 or more.....	29	1,526,661	25	77,280	29	1,449,381	23	28,510
Size of net worth	Investment real estate		Closely held stock		Other stocks		State and local bonds	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Total.....	3,843	1,531,767	1,287	1,325,080	4,854	2,709,434	2,073	633,108
Size of net worth:								
Negative net worth.....	24	15,059	8	3,087	13	1,120	--	--
\$1 under \$600,000.....	578	116,607	200	31,493	748	68,421	102	3,178
\$600,000 under \$1,000,000.....	1,396	311,718	316	79,012	1,847	419,137	760	85,986
\$1,000,000 under \$2,500,000.....	1,331	484,712	472	236,900	1,650	785,808	843	176,180
\$2,500,000 under \$5,000,000.....	325	231,284	167	182,806	377	420,944	225	110,273
\$5,000,000 under \$10,000,000.....	122	152,351	78	198,902	147	350,633	95	92,840
\$10,000,000 under \$20,000,000.....	40	85,883	27	138,892	44	213,119	30	64,786
\$20,000,000 or more.....	25	134,154	20	453,989	27	450,253	18	99,866
Size of net worth	Federal savings bonds		Other Federal bonds		Corporate and foreign bonds		Bond funds	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
Total.....	849	24,946	1,338	239,307	1,152	96,055	538	39,532
Size of net worth:								
Negative net worth.....	2	4	1	12	2	4	--	--
\$1 under \$600,000.....	139	832	75	3,149	69	1,191	47	2,112
\$600,000 under \$1,000,000.....	363	10,093	544	52,696	462	23,382	224	11,705
\$1,000,000 under \$2,500,000.....	275	11,103	523	78,804	461	35,526	208	16,218
\$2,500,000 under \$5,000,000.....	49	2,186	126	37,153	100	12,031	38	4,342
\$5,000,000 under \$10,000,000.....	15	502	47	27,941	36	6,636	15	3,712
\$10,000,000 under \$20,000,000.....	4	139	15	12,102	13	6,515	3	609
\$20,000,000 or more.....	2	86	8	27,451	9	10,772	2	835

Personal Wealth, 1998

Table 1.--Personal Wealth, 1998: Type of Property by Size of Net Worth--Continued

[All figures are estimates based on samples--numbers are in thousands, money amounts are in millions of dollars]

Size of net worth	Unclassifiable mutual funds		Cash and money market accounts		Mortgages and notes		Cash value life insurance	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)
Total.....	1,659	111,718	6,365	1,014,273	1,396	291,600	4,573	221,118
Size of net worth:								
Negative net worth.....	2	26	29	1,084	5	1,188	35	3,342
\$1 under \$600,000.....	249	7,707	1,200	51,733	163	10,571	1,187	65,416
\$600,000 under \$1,000,000.....	657	36,754	2,438	274,069	464	58,968	1,620	51,804
\$1,000,000 under \$2,500,000.....	571	38,373	2,020	347,609	497	88,437	1,315	63,233
\$2,500,000 under \$5,000,000.....	121	12,101	435	123,887	156	47,906	274	21,965
\$5,000,000 under \$10,000,000.....	41	6,122	164	87,397	70	29,547	97	9,309
\$10,000,000 under \$20,000,000.....	11	3,251	50	42,049	23	19,201	27	3,094
\$20,000,000 or more.....	7	7,384	29	86,446	18	35,783	19	2,954
Size of net worth	Noncorporate business assets		Limited partnerships		Retirement assets		Other assets	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)
Total.....	1,148	264,256	805	232,879	3,857	1,017,641	5,782	310,035
Size of net worth:								
Negative net worth.....	11	2,699	1	958	9	1,436	34	1,403
\$1 under \$600,000.....	209	22,014	50	2,864	836	95,343	1,119	30,267
\$600,000 under \$1,000,000.....	351	43,097	230	10,726	1,410	259,392	2,155	62,733
\$1,000,000 under \$2,500,000.....	386	76,596	331	30,973	1,194	381,213	1,840	85,369
\$2,500,000 under \$5,000,000.....	110	38,424	105	29,066	262	137,971	404	37,926
\$5,000,000 under \$10,000,000.....	50	31,129	49	23,932	96	77,434	152	32,234
\$10,000,000 under \$20,000,000.....	18	25,786	23	46,758	32	33,523	49	15,363
\$20,000,000 or more.....	14	24,511	16	87,602	19	31,329	27	44,738

Personal Wealth, 1998

Table 2.-- Personal Wealth, 1998: Male Top Wealthholders, Type of Property, by Size of Net Worth

[All figures are estimates based on samples--numbers are in thousands, money amounts are in millions of dollars]

Size of net worth	Total assets		Debts and mortgages		Net worth		Personal residence	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Total.....	3,997	6,955,881	3,115	720,436	3,997	6,235,446	2,894	607,398
Size of net worth:								
Negative net worth.....	36	33,841	36	84,915	36	-51,073	20	4,389
\$1 under \$600,000.....	971	516,466	856	154,914	971	361,552	741	117,785
\$600,000 under \$1,000,000.....	1,329	1,143,758	964	113,178	1,329	1,030,580	939	150,338
\$1,000,000 under \$2,500,000.....	1,236	1,993,000	911	154,675	1,236	1,838,325	881	192,275
\$2,500,000 under \$5,000,000.....	271	985,704	216	64,319	271	921,385	199	68,364
\$5,000,000 under \$10,000,000.....	101	738,746	86	51,218	101	687,528	76	35,393
\$10,000,000 under \$20,000,000.....	33	479,531	27	30,871	33	448,659	24	18,277
\$20,000,000 or more.....	20	1,064,835	18	66,346	20	998,488	15	20,578
Size of net worth	Investment real estate		Closely held stock		Other stocks		State and local bonds	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Total.....	2,389	995,780	966	996,910	2,898	1,508,805	1,040	312,995
Size of net worth:								
Negative net worth.....	22	14,355	7	3,070	13	1,120	--	--
\$1 under \$600,000.....	448	91,300	167	25,139	569	49,659	63	1,936
\$600,000 under \$1,000,000.....	780	186,228	232	60,326	984	217,607	332	33,373
\$1,000,000 under \$2,500,000.....	814	297,686	348	181,930	969	430,310	438	77,858
\$2,500,000 under \$5,000,000.....	203	146,622	122	140,297	227	229,542	123	49,784
\$5,000,000 under \$10,000,000.....	76	102,395	55	139,972	89	180,771	53	43,925
\$10,000,000 under \$20,000,000.....	28	62,574	20	105,935	29	122,404	19	42,831
\$20,000,000 or more.....	18	94,619	15	340,240	19	277,394	12	63,288
Size of net worth	Federal savings bonds		Other Federal bonds		Corporate and foreign bonds		Bond funds	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
Total.....	494	12,396	667	127,689	618	55,836	293	24,476
Size of net worth:								
Negative net worth.....	2	4	--	--	2	4	--	--
\$1 under \$600,000.....	100	499	53	2,493	46	807	28	1,311
\$600,000 under \$1,000,000.....	191	4,894	228	16,601	211	10,252	111	6,261
\$1,000,000 under \$2,500,000.....	159	5,219	277	41,696	259	19,506	117	9,388
\$2,500,000 under \$5,000,000.....	27	1,270	70	21,708	63	7,895	24	3,355
\$5,000,000 under \$10,000,000.....	10	344	25	18,808	23	3,963	9	3,094
\$10,000,000 under \$20,000,000.....	3	105	10	7,404	9	5,050	2	445
\$20,000,000 or more.....	1	59	4	18,980	6	8,360	1	622

Personal Wealth, 1998

Table 2.-- Personal Wealth, 1998: Male Top Wealthholders, Type of Property, by Size of Net Worth --Continued

[All figures are estimates based on samples--numbers are in thousands, money amounts are in millions of dollars]

Size of net worth	Unclassifiable mutual funds		Cash and money market accounts		Mortgages and notes		Cash value life insurance	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)
Total.....	991	68,440	3,881	595,195	883	188,439	3,242	188,042
Size of net worth:								
Negative net worth.....	1	1	26	1,069	5	1,188	33	3,180
\$1 under \$600,000.....	182	4,874	926	37,837	123	7,274	931	54,200
\$600,000 under \$1,000,000.....	347	18,571	1,301	131,364	259	30,478	1,030	41,695
\$1,000,000 under \$2,500,000.....	342	23,592	1,209	199,775	319	57,416	934	54,844
\$2,500,000 under \$5,000,000.....	80	8,886	267	78,411	101	26,633	205	20,093
\$5,000,000 under \$10,000,000.....	26	4,167	100	52,975	46	22,445	73	8,620
\$10,000,000 under \$20,000,000.....	8	1,417	32	28,037	16	14,473	21	2,710
\$20,000,000 or more.....	5	6,931	20	65,727	13	28,533	15	2,701

Size of net worth	Noncorporate business assets		Limited partnerships		Retirement assets		Other assets	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)
Total.....	842	191,560	481	149,237	2,508	737,654	3,562	195,032
Size of net worth:								
Negative net worth.....	11	2,699	1	583	8	857	31	1,322
\$1 under \$600,000.....	184	19,692	34	2,201	639	75,913	870	23,545
\$600,000 under \$1,000,000.....	243	32,593	122	4,999	803	162,356	1,167	35,822
\$1,000,000 under \$2,500,000.....	271	56,114	197	18,222	773	272,199	1,107	54,973
\$2,500,000 under \$5,000,000.....	76	28,578	69	21,014	182	111,220	245	22,034
\$5,000,000 under \$10,000,000.....	34	21,343	33	14,625	68	64,866	92	21,040
\$10,000,000 under \$20,000,000.....	13	9,807	15	21,586	22	28,499	31	7,977
\$20,000,000 or more.....	11	20,733	12	66,006	14	21,743	19	28,320

Personal Wealth, 1998

Table 3.--Personal Wealth, 1998: Female Top Wealthholders, Type of Property, by Size of Net Worth

[All figures are estimates based on samples--numbers are in thousands, money amounts are in millions of dollars]

Size of net worth	Total assets		Debts and mortgages		Net worth		Personal residence	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Total.....	2,533	4,186,907	1,905	236,775	2,533	3,950,132	1,876	472,645
Size of net worth:								
Negative net worth.....	3	2,512	3	5,172	3	-2,661	3	543
\$1 under \$600,000.....	282	154,921	249	40,469	282	114,452	224	40,706
\$600,000 under \$1,000,000.....	1,165	966,814	820	58,995	1,165	907,818	825	168,965
\$1,000,000 under \$2,500,000.....	822	1,296,005	618	67,649	822	1,228,355	627	159,677
\$2,500,000 under \$5,000,000.....	169	584,050	141	25,443	169	558,606	126	51,126
\$5,000,000 under \$10,000,000.....	65	457,354	52	19,252	65	438,102	50	30,086
\$10,000,000 under \$20,000,000.....	18	263,425	15	8,859	18	254,566	14	13,609
\$20,000,000 or more.....	9	461,826	7	10,934	9	450,892	8	7,932
Size of net worth	Investment real estate		Closely held stock		Other stocks		State and local bonds	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Total.....	1,453	535,986	321	328,170	1,955	1,200,629	1,033	320,113
Size of net worth:								
Negative net worth.....	2	703	1	17	1	1	--	--
\$1 under \$600,000.....	130	25,307	33	6,353	179	18,763	39	1,241
\$600,000 under \$1,000,000.....	616	125,490	85	18,686	863	201,530	427	52,614
\$1,000,000 under \$2,500,000.....	518	187,026	124	54,970	681	355,498	406	98,322
\$2,500,000 under \$5,000,000.....	121	84,662	45	42,509	149	191,402	102	60,488
\$5,000,000 under \$10,000,000.....	46	49,956	23	58,930	58	169,862	42	48,915
\$10,000,000 under \$20,000,000.....	13	23,308	7	32,957	15	90,715	11	21,955
\$20,000,000 or more.....	7	39,535	5	113,749	8	172,859	6	36,578
Size of net worth	Federal savings bonds		Other Federal bonds		Corporate and foreign bonds		Bond funds	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
Total.....	356	12,550	671	111,617	533	40,220	245	15,057
Size of net worth:								
Negative net worth.....	--	--	1	12	--	--	--	--
\$1 under \$600,000.....	39	333	22	656	24	383	19	801
\$600,000 under \$1,000,000.....	172	5,199	316	36,095	251	13,130	113	5,443
\$1,000,000 under \$2,500,000.....	115	5,884	246	37,108	202	16,021	91	6,831
\$2,500,000 under \$5,000,000.....	22	916	56	15,445	37	4,137	14	987
\$5,000,000 under \$10,000,000.....	5	158	22	9,133	13	2,673	6	618
\$10,000,000 under \$20,000,000.....	1	34	6	4,698	5	1,465	1	165
\$20,000,000 or more.....	1	27	3	8,471	2	2,411	1	213

Personal Wealth, 1998

Table 3.--Personal Wealth, 1998: Female Top Wealthholders, Type of Property, by Size of Net Worth --Continued

[All figures are estimates based on samples--numbers are in thousands, money amounts are in millions of dollars]

Size of net worth	Unclassifiable mutual funds		Cash and money market accounts		Mortgages and notes		Cash value life insurance	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)
Total.....	668	43,278	2,485	419,078	513	103,161	1,331	33,076
Size of net worth:								
Negative net worth.....	1	24	2	15	1	1	2	163
\$1 under \$600,000.....	66	2,833	273	13,896	40	3,297	256	11,216
\$600,000 under \$1,000,000.....	311	18,183	1,138	142,705	204	28,490	590	10,109
\$1,000,000 under \$2,500,000.....	229	14,781	811	147,834	178	31,021	381	8,389
\$2,500,000 under \$5,000,000.....	41	3,216	168	45,475	55	21,273	68	1,873
\$5,000,000 under \$10,000,000.....	14	1,955	64	34,422	24	7,102	24	689
\$10,000,000 under \$20,000,000.....	4	1,834	18	14,012	6	4,728	6	384
\$20,000,000 or more.....	2	452	9	20,719	5	7,251	4	253

Size of net worth	Noncorporate business assets		Limited partnerships		Retirement assets		Other assets	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)
Total.....	306	72,696	324	83,642	1,349	279,987	2,220	115,003
Size of net worth:								
Negative net worth.....	--	--	--	375	2	579	3	82
\$1 under \$600,000.....	25	2,322	16	662	197	19,430	249	6,723
\$600,000 under \$1,000,000.....	109	10,503	108	5,727	607	97,036	989	26,911
\$1,000,000 under \$2,500,000.....	115	20,482	134	12,751	421	109,014	733	30,397
\$2,500,000 under \$5,000,000.....	34	9,846	36	8,052	80	26,751	159	15,893
\$5,000,000 under \$10,000,000.....	16	9,786	16	9,308	28	12,568	60	11,194
\$10,000,000 under \$20,000,000.....	5	15,980	8	25,172	9	5,023	18	7,386
\$20,000,000 or more.....	3	3,777	5	21,596	5	9,586	9	16,418

Personal Wealth, 1998

Table 4.--Male Top Wealthholders, 1998: Type of Property, by Age

[All figures are estimates based on samples--numbers are in thousands, money amounts are in millions of dollars]

Age	Total assets		Debts and mortgages		Net worth		Personal residence	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Total.....	3,997	6,955,881	3,115	720,436	3,997	6,235,446	2,894	607,398
Age								
Under 50.....	1,582	2,223,439	1,357	344,444	1,582	1,878,995	1,100	230,423
50 under 65.....	1,408	2,667,849	1,122	292,202	1,408	2,375,647	1,094	233,613
65 under 75.....	638	1,284,573	415	65,370	638	1,219,203	467	97,484
75 under 85.....	262	508,571	154	13,693	262	494,878	176	34,513
85 and older.....	107	271,449	68	4,727	107	266,723	57	11,365

Age	Investment real estate		Closely held stock		Other stocks		State and local bonds	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Total.....	2,389	995,780	966	996,910	2,898	1,508,805	1,040	312,995
Age								
Under 50.....	778	290,928	414	389,605	1,064	435,275	255	76,328
50 under 65.....	953	426,395	379	393,157	1,035	516,884	315	72,925
65 under 75.....	440	189,586	132	140,133	497	308,455	260	73,197
75 under 85.....	166	64,214	32	35,230	215	155,197	145	57,251
85 and older.....	52	24,658	8	38,785	87	92,995	65	33,294

Age	Federal savings bonds		Other Federal bonds		Corporate and foreign bonds		Bond funds	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
Total.....	494	12,396	667	127,689	618	55,836	293	24,476
Age								
Under 50.....	149	1,538	168	37,774	144	10,404	82	8,456
50 under 65.....	185	3,088	213	32,184	216	20,030	113	8,030
65 under 75.....	99	4,431	164	31,059	159	14,239	57	4,749
75 under 85.....	43	2,126	85	15,582	72	6,487	31	2,266
85 and older.....	17	1,213	37	11,091	28	4,676	10	975

Personal Wealth, 1998

Table 4.--Male Top Wealthholders, 1998: Type of Property, by Age--Continued

[All figures are estimates based on samples--numbers are in thousands, money amounts are in millions of dollars]

Age	Unclassifiable mutual funds		Cash and money market accounts		Mortgages and notes		Cash value life insurance	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)
Total.....	991	68,440	3,881	595,195	883	188,439	3,242	188,042
Age								
Under 50.....	326	21,868	1,513	188,396	295	66,311	1,302	69,436
50 under 65.....	385	26,524	1,375	203,772	325	68,140	1,203	87,973
65 under 75.....	190	13,812	628	120,115	181	38,544	484	22,536
75 under 85.....	68	4,739	258	56,178	62	11,395	191	6,430
85 and older.....	22	1,497	106	26,733	19	4,049	63	1,667

Age	Noncorporate business assets		Limited partnerships		Retirement assets		Other assets	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)
Total.....	842	191,560	481	149,237	2,508	737,654	3,562	195,032
Age								
Under 50.....	334	76,364	126	51,909	978	201,975	1,375	66,450
50 under 65.....	329	80,254	195	60,410	980	356,532	1,296	77,938
65 under 75.....	125	25,728	103	21,884	399	146,978	574	31,645
75 under 85.....	43	7,046	45	11,699	125	28,089	230	10,129
85 and older.....	12	2,168	11	3,334	26	4,079	87	8,871

Personal Wealth, 1998

Table 5.--Female Top Wealthholders, 1998: Type of Property, by Age

[All figures are estimates based on samples--numbers are in thousands, money amounts are in millions of dollars]

Age	Total assets		Debts and mortgages		Net worth		Personal residence	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Total.....	2,533	4,186,907	1,905	236,775	2,533	3,950,132	1,876	472,645
Age								
Under 50.....	736	1,208,760	603	114,348	736	1,094,411	555	150,397
50 under 65.....	724	1,187,252	547	77,770	724	1,109,482	593	157,752
65 under 75.....	505	802,520	341	26,970	505	775,550	384	88,748
75 under 85.....	404	675,508	290	13,253	404	662,255	271	58,874
85 and older.....	164	312,866	124	4,434	164	308,433	73	16,874
Age	Investment real estate		Closely held stock		Other stocks		State and local bonds	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Total.....	1,453	535,986	321	328,170	1,955	1,200,629	1,033	320,113
Age								
Under 50.....	367	124,695	127	151,352	503	312,688	184	55,523
50 under 65.....	480	204,353	118	103,551	587	284,985	266	61,123
65 under 75.....	318	108,254	49	44,566	406	229,532	261	79,500
75 under 85.....	218	74,070	20	21,114	326	233,285	230	86,066
85 and older.....	71	24,613	6	7,588	134	140,139	92	37,901
Age	Federal savings bonds		Other Federal bonds		Corporate and foreign bonds		Bond funds	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
Total.....	356	12,550	671	111,617	533	40,220	245	15,057
Age								
Under 50.....	74	563	135	33,020	96	8,247	46	3,791
50 under 65.....	105	2,792	177	20,720	154	12,080	83	3,818
65 under 75.....	82	3,978	146	21,325	132	9,283	55	3,579
75 under 85.....	67	3,391	150	23,176	111	7,071	38	1,947
85 and older.....	27	1,826	63	13,376	41	3,539	22	1,921

Personal Wealth, 1998

Table 5.--Female Top Wealthholders, 1998: Type of Property, by Age--Continued

[All figures are estimates based on samples--numbers are in thousands, money amounts are in millions of dollars]

Age in current dollars	Unclassifiable mutual funds		Cash and money market accounts		Mortgages and notes		Cash value life insurance	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)
Total.....	668	43,278	2,485	419,078	513	103,161	1,331	33,076
Age								
Under 50.....	180	11,609	715	103,000	149	45,395	460	13,027
50 under 65.....	219	13,974	706	104,445	135	21,674	442	12,690
65 under 75.....	144	9,144	500	87,012	121	18,089	219	3,958
75 under 85.....	93	6,226	401	85,715	85	14,271	162	2,784
85 and older.....	33	2,324	163	38,905	23	3,732	47	617

Age in current dollars	Noncorporate business assets		Limited partnerships		Retirement assets		Other assets	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)
Total.....	306	72,696	324	83,642	1,349	279,987	2,220	115,003
Age								
Under 50.....	105	33,668	70	31,698	445	95,963	615	34,123
50 under 65.....	102	23,602	111	23,978	469	101,498	669	34,217
65 under 75.....	52	7,280	81	13,795	264	54,452	455	20,024
75 under 85.....	34	6,038	49	10,756	145	24,040	359	16,684
85 and older.....	13	2,107	13	3,415	26	4,034	122	9,954

Personal Wealth, 1998

Table 6.--Top Wealthholders with Net Worth Under \$20,000,000 and Gross Assets of \$625,000 or More, 1998: Total and Selected Assets, Debts and Mortgages, and Net Worth, by State of Residence

[All figures are estimates based on estate tax return samples--numbers are in thousands, money amounts are in millions]

State of residence	Total assets		Debts and mortgages		Net worth	
	Number	Amount	Number	Amount	Number	Amount
	(1)	(2)	(3)	(4)	(5)	(6)
Total.....	6,501	9,616,127	4,995	879,931	6,501	8,736,196
State of residence:						
Alabama.....	64	95,848	53	8,622	64	87,226
Alaska.....	12	16,897	9	2,148	12	14,749
Arizona.....	105	141,991	87	10,366	105	131,625
Arkansas.....	35	48,543	27	5,709	35	42,835
California.....	895	1,423,650	738	164,954	895	1,258,696
Colorado.....	120	187,246	90	20,706	120	166,540
Connecticut.....	121	197,524	99	12,721	121	184,804
Delaware.....	19	25,208	14	2,164	19	23,043
District of Columbia.....	45	55,158	42	7,831	45	47,327
Florida.....	461	746,651	332	83,340	461	663,312
Georgia.....	163	240,109	136	29,724	163	210,385
Hawaii.....	25	30,986	21	4,133	25	26,853
Idaho.....	27	37,907	22	2,429	27	35,477
Illinois.....	310	498,267	253	44,690	310	453,577
Indiana.....	91	122,264	62	8,465	91	113,799
Iowa.....	79	82,349	61	7,985	79	74,364
Kansas.....	60	79,855	43	8,906	60	70,950
Kentucky.....	56	91,964	41	6,496	56	85,468
Louisiana.....	68	98,895	58	9,419	68	89,476
Maine.....	15	23,549	10	1,411	15	22,138
Maryland.....	132	176,119	107	15,041	132	161,078
Massachusetts.....	205	281,523	167	27,115	205	254,409
Michigan.....	203	271,213	142	19,075	203	252,138
Minnesota.....	114	146,828	81	11,283	114	135,546
Mississippi.....	34	49,803	29	3,460	34	46,343
Missouri.....	111	161,460	78	12,061	111	149,399
Montana.....	23	34,958	17	4,169	23	30,789
Nebraska.....	56	66,175	38	6,220	56	59,955
Nevada.....	38	76,998	30	6,181	38	70,817
New Hampshire.....	31	44,234	24	3,657	31	40,578
New Jersey.....	264	386,032	183	23,001	264	363,031
New Mexico.....	21	38,833	19	4,006	21	34,827
New York.....	565	869,428	435	74,213	565	795,215
North Carolina.....	175	238,177	133	23,511	175	214,666
North Dakota.....	21	21,371	12	4,108	21	17,263
Ohio.....	233	313,112	150	20,403	233	292,709
Oklahoma.....	49	75,883	34	7,652	49	68,231
Oregon.....	72	106,012	53	10,645	72	95,368
Pennsylvania.....	261	393,377	199	25,584	261	367,793
Rhode Island.....	28	42,301	24	2,879	28	39,422
South Carolina.....	92	122,632	72	10,751	92	111,882
South Dakota.....	13	19,351	8	998	13	18,353
Tennessee.....	109	146,733	79	13,020	109	133,712
Texas.....	370	544,314	297	45,923	370	498,391
Utah.....	37	49,997	27	4,633	37	45,364
Vermont.....	11	17,437	9	1,139	11	16,299
Virginia.....	165	234,400	134	20,644	165	213,756
Washington.....	131	202,297	103	18,850	131	183,447
West Virginia.....	30	39,129	17	2,058	30	37,070
Wisconsin.....	110	154,240	81	11,682	110	142,558
Wyoming.....	7	13,100	5	854	7	12,246
Other areas.....	21	33,800	13	2,899	21	30,901

Personal Wealth, 1998

Table 6.--Top Wealthholders with Net Worth Under \$20,000,000 and Gross Assets of \$625,000 or More, 1998: Total and Selected Assets, Debts and Mortgages, and Net Worth, by State of Residence --Continued

[All figures are estimates based on estate tax return samples--numbers are in thousands, money amounts are in millions]

State of residence	Real estate		Corporate stock		Cash		Total bonds	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Total.....	5,834	2,449,146	5,218	3,130,272	3,422	893,940	6,336	927,827
State of residence:								
Alabama.....	58	23,920	55	34,638	30	8,469	63	8,052
Alaska.....	10	3,960	9	5,361	3	696	12	1,315
Arizona.....	93	33,637	86	46,978	57	15,812	103	12,426
Arkansas.....	33	10,361	30	18,145	16	3,261	35	4,535
California.....	823	539,582	694	365,527	470	113,802	872	131,679
Colorado.....	108	55,855	96	56,834	50	13,892	116	12,285
Connecticut.....	105	44,983	92	68,295	64	19,687	120	19,683
Delaware.....	18	5,237	17	10,605	13	1,909	19	2,441
District of Columbia.....	43	13,697	21	11,299	35	12,726	45	10,435
Florida.....	415	154,591	385	276,053	266	94,302	441	65,772
Georgia.....	144	67,675	127	85,109	63	13,585	159	20,584
Hawaii.....	23	10,588	19	9,881	16	1,578	24	3,248
Idaho.....	26	13,277	23	11,469	11	1,983	26	2,905
Illinois.....	269	114,711	259	160,923	176	47,096	305	47,456
Indiana.....	83	29,550	69	43,095	51	11,116	88	11,556
Iowa.....	72	24,197	56	21,805	37	5,376	78	9,461
Kansas.....	55	17,475	50	27,293	27	6,398	60	6,915
Kentucky.....	53	20,785	45	39,107	25	5,859	55	7,993
Louisiana.....	59	24,866	57	26,771	37	10,326	65	12,242
Maine.....	12	4,261	13	9,535	10	2,041	14	2,077
Maryland.....	124	43,993	112	58,764	71	16,787	130	16,773
Massachusetts.....	182	83,115	154	85,687	100	27,140	200	25,765
Michigan.....	179	59,907	168	99,031	113	21,040	199	30,000
Minnesota.....	106	29,512	95	49,163	67	13,708	109	12,284
Mississippi.....	32	11,596	27	18,041	18	3,699	33	4,545
Missouri.....	97	34,739	94	60,874	60	15,639	109	14,098
Montana.....	20	11,990	17	7,825	13	2,173	23	2,713
Nebraska.....	47	15,665	44	25,834	27	4,308	56	5,824
Nevada.....	34	18,055	33	24,021	22	9,758	38	10,050
New Hampshire.....	26	9,994	25	18,245	19	4,276	30	3,007
New Jersey.....	235	76,944	226	138,510	158	41,439	259	45,047
New Mexico.....	21	9,295	18	17,794	9	1,982	21	2,499
New York.....	470	205,256	409	257,082	278	101,540	540	91,770
North Carolina.....	166	70,216	149	80,218	74	15,330	172	18,881
North Dakota.....	19	5,565	16	2,658	8	1,888	20	2,713
Ohio.....	205	62,586	194	115,195	113	26,075	227	32,501
Oklahoma.....	42	11,876	41	26,905	24	8,258	47	11,531
Oregon.....	64	27,301	57	34,568	39	9,388	70	6,974
Pennsylvania.....	224	66,713	210	132,039	164	39,807	252	37,059
Rhode Island.....	25	10,115	24	18,657	19	3,553	28	3,450
South Carolina.....	85	34,694	75	48,049	41	8,932	88	7,825
South Dakota.....	13	4,361	10	5,865	5	1,287	11	1,716
Tennessee.....	106	38,083	87	47,054	51	9,784	105	16,973
Texas.....	344	111,329	304	161,607	203	61,363	368	61,126
Utah.....	34	13,139	27	17,951	15	2,714	35	3,507
Vermont.....	10	4,078	10	8,897	4	1,345	11	1,530
Virginia.....	154	53,894	138	87,796	89	17,007	161	23,562
Washington.....	123	59,202	115	63,061	75	14,970	130	18,672
West Virginia.....	25	6,201	23	16,900	14	2,761	30	3,440
Wisconsin.....	98	34,910	92	58,753	64	11,387	108	13,238
Wyoming.....	6	2,625	6	3,763	4	1,467	7	1,099
Other areas.....	17	8,990	15	10,740	7	3,219	21	4,598

Personal Wealth, 1998

Table 7.--Top Wealthholders with Net Worth of \$1 Million or More, 1998: Total Assets, Debts and Mortgages, and Net Worth, by State of Residence

[All figures are estimates based on estate tax returns; numbers are in thousands--money amounts are in millions]

State of residence	Total assets		Debts and mortgages		Net worth	
	Number	Amount	Number	Amount	Number	Amount
	(1)	(2)	(3)	(4)	(5)	(6)
Total.....	2,743	8,324,476	2,092	499,568	2,743	7,824,909
State of residence:						
Alabama.....	30	81,295	26	6,958	30	74,337
Alaska.....	6	12,683	4	996	6	11,686
Arizona.....	42	123,801	32	5,155	42	118,646
Arkansas.....	14	41,292	10	1,674	14	39,618
California.....	412	1,238,816	341	98,566	412	1,140,250
Colorado.....	56	150,016	42	8,173	56	141,843
Connecticut.....	65	193,805	58	10,799	65	183,006
Delaware.....	7	16,824	5	1,110	7	15,714
District of Columbia.....	8	23,874	7	2,240	8	21,635
Florida.....	206	649,441	151	34,606	206	614,835
Georgia.....	64	194,151	50	12,682	64	181,469
Hawaii.....	7	21,163	5	1,745	7	19,418
Idaho.....	10	24,964	8	952	10	24,012
Illinois.....	146	422,207	115	23,720	146	398,488
Indiana.....	35	123,224	23	4,628	35	118,596
Iowa.....	26	47,013	18	2,161	26	44,852
Kansas.....	20	56,880	13	4,512	20	52,368
Kentucky.....	24	76,780	18	3,271	24	73,509
Louisiana.....	24	74,558	20	5,296	24	69,262
Maine.....	8	19,519	6	1,010	8	18,509
Maryland.....	53	137,365	41	8,014	53	129,351
Massachusetts.....	81	219,383	69	17,263	81	202,120
Michigan.....	74	206,350	53	9,071	74	197,279
Minnesota.....	37	107,509	26	5,480	37	102,029
Mississippi.....	16	60,739	14	1,585	16	59,154
Missouri.....	50	127,135	34	5,578	50	121,557
Montana.....	10	24,577	8	2,936	10	21,641
Nebraska.....	17	41,387	10	3,045	17	38,343
Nevada.....	21	93,829	16	7,183	21	86,646
New Hampshire.....	16	37,061	11	2,243	16	34,819
New Jersey.....	116	359,094	79	21,234	116	337,860
New Mexico.....	11	85,483	9	4,017	11	81,466
New York.....	243	906,742	188	51,193	243	855,549
North Carolina.....	62	223,081	43	13,958	62	209,123
North Dakota.....	5	10,940	3	1,072	5	9,867
Ohio.....	85	236,997	58	10,742	85	226,254
Oklahoma.....	21	57,483	13	3,375	21	54,108
Oregon.....	27	74,671	21	5,286	27	69,385
Pennsylvania.....	122	320,611	93	16,640	122	303,971
Rhode Island.....	11	30,953	7	1,231	11	29,722
South Carolina.....	33	100,376	24	5,811	33	94,565
South Dakota.....	6	15,102	4	158	6	14,944
Tennessee.....	42	124,081	31	7,345	42	116,736
Texas.....	156	477,526	123	28,263	156	449,263
Utah.....	16	45,522	11	1,989	16	43,533
Vermont.....	4	13,098	4	458	4	12,641
Virginia.....	67	188,564	56	10,075	67	178,488
Washington.....	58	178,716	44	13,265	58	165,450
West Virginia.....	11	29,096	5	945	11	28,150
Wisconsin.....	48	143,773	34	7,164	48	136,609
Wyoming.....	3	15,398	2	503	3	14,895
Other areas.....	10	39,528	7	2,192	10	37,336