Recent Changes in U.S. Family Finances: Results from the 1998 Survey of Consumer Finances

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Using data from the Federal Reserve Board's two most recent Surveys of Consumer Finances, this article provides a detailed picture of changes in the financial condition of U.S. families between 1995 and 1998. The discussion also refers to selected data from the two preceding surveys to provide a broader context within which to interpret the more recent changes.[1]

The financial situation of families changed notably between 1995 and 1998. While income continued a moderate upward trend, net worth grew strongly, and the increase in net worth was broadly shared by different demographic groups. A continued rise in the holding of stock equity combined with a booming stock market accounts for a substantial part of the rise in net worth. The 3.5 percentage point decline in the proportion of families without some type of transaction account—a group that tends to have low incomes—suggests that improvements in financial circumstances were also shared by many people who did not own stocks. The indebtedness of families grew, but less rapidly than their assets. Nonetheless, compared with 1995, debt repayments in 1998 accounted for a larger share of the income of the typical family with debt, and the proportion of debtors who were late with their payments by sixty days or more in the year preceding the survey was also higher.

Background

In 1998, the U.S. economy entered the seventh year of an economic expansion. The civilian unemployment rate had fallen from 5.7 percent in September 1995 to 4.5 percent in September 1998. At the same time, inflation remained subdued, with the consumer price index rising at an average annual rate of 2.2 percent over the period.[2]

Interest rates on deposits remained fairly steady. Mortgage rates fluctuated over the period but declined overall, from 7.4 percent in 1995 to 6.9 percent in 1998. Over the same period, key asset prices rose markedly. Standard and Poor's index of 500 stock prices registered an extraordinary gain of 76 percent, and the median price of existing homes sold rose 15 percent, to $129,400.

Institutional, regulatory, and market changes during this time altered the context in which families planned their finances. Employers continued to expand offerings of tax-deferred retirement accounts for their workers; new means of stock trading emerged, such as Internet-based brokerage services; automobile dealers added less-expensive models to the range of vehicles available for leasing; lenders became increasingly willing to accept mortgages with very low down payments; and many banks faced increased regulatory pressure to provide equitable access to credit.[3]

Ongoing demographic trends continued to change the structure of the population. Overall population growth was about 2.8 percent between 1995 and 1998. With the aging of the "baby boom" population, the number of people aged 45 to 64 grew about 9.5 percent. The population in some other age groups grew less, and the number of children aged less than 5 declined slightly. The number of households rose

1. The four surveys were conducted in 1989, 1992, 1995, and 1998. For a detailed discussion of results from earlier surveys, see Arthur B. Kennickell and Martha Starr-McCluer, "Changes in Family Finances from 1989 to 1992: Evidence from the Survey of Consumer Finances," *Federal Reserve Bulletin,* vol. 80 (October 1994), pp. 861–82; and Arthur B. Kennickell, Martha Starr-McCluer, and Annika E. Sundén, "Family Finances in the U.S.: Recent Evidence from the Survey of Consumer Finances," *Federal Reserve Bulletin,* vol. 83 (January 1997), pp. 1–24. Tabulations of data from the four surveys will be available on the Internet at www.federalreserve.gov/pubs/oss/oss2/98/scf98home.html.

2. All aggregate statistics cited in this section are for September except as noted; September is the midpoint of the period during which interviews were conducted.

3. For an examination of the wider availability of mortgage credit over this period, see Glenn B. Canner, Wayne Passmore, and Elizabeth Laderman, "The Role of Specialized Lenders in Extending Mortgages to Lower-Income and Minority Households," *Federal Reserve Bulletin,* vol. 85 (November 1999), pp. 709–23.

3.5 percent, while the average number of people per household declined somewhat.

Family Income

To measure income, the survey requests information on families' total cash income, before taxes, for the full calendar year preceding the interview (see box "The Survey of Consumer Finances"). In the 1998 survey, inflation-adjusted mean and median family incomes continued the upward trend observed between the 1992 and 1995 surveys; they also surpassed the levels observed in the 1989 survey, toward the end of the previous economic expansion (table 1). Overall, trends in mean and median income shown in the four surveys accord well with those shown in the Current Population Survey (CPS) of the Bureau of the Census.

From 1995 to 1998, the proportion of families with incomes of $50,000 or more rose about one-fifth, to 33.8 percent, while the proportion with incomes below $10,000 fell about one-sixth, to 12.6 percent.

Some cross-sectional patterns hold consistently in the survey data since 1989. Median income is successively higher for each age group through 45–54 and

The Survey of Consumer Finances

The Survey of Consumer Finances (SCF) is a triennial survey of U.S. families sponsored by the Board of Governors of the Federal Reserve System with the cooperation of the U.S. Department of the Treasury. The term "family" as it is used here is more comparable to the U.S. Bureau of the Census definition of "household" than to their use of "family," which excludes the possibility of a family of one individual. The appendix to this article provides a full technical definition of "family" for the SCF. The survey is designed to provide detailed information on U.S. families' balance sheets and their use of financial services, as well as on their pensions, labor force participation, and demographic characteristics as of the time of the interview. It also collects information on families' total cash income, before taxes, for the calendar year preceding the survey. Because only minor changes have been made in the wording of the questionnaire since 1989, the underlying measurements are highly comparable over time.

The need to measure financial characteristics imposes special requirements on the sample design for the survey. The survey is expected to provide reliable information both on attributes that are broadly distributed in the population—for example, home ownership—and on those that are highly concentrated in a relatively small part of the population—for example, ownership of closely held businesses. To address this requirement, the SCF employs a dual-frame sample design consisting of both a standard, geographically based random sample and a special oversample of relatively wealthy families. This design has been essentially unchanged since 1989. Weights are used to combine information from the two samples to make estimates for the full population. Recent modifications to the survey weights, which are described in the appendix, have enhanced the comparability of the time series of survey estimates.

This article draws principally upon the final data from the 1995 survey and nearly final data from the 1998 survey. To provide a larger context, some information is also included from the final versions of the 1989 and 1992 surveys. Differences between estimates from earlier surveys as reported here and as reported in earlier *Federal Reserve Bulletin* articles are attributable to additional statistical processing of the data, to revisions of the weights, and to adjustments for inflation. Since 1992, the SCF has been conducted by the National Opinion Research Center at the University of Chicago (NORC) between July and December of each survey year. The 1989 SCF was conducted by the Survey Research Center at the University of Michigan. In the 1995 survey, 4,299 families were interviewed, and in the 1998 survey, 4,309 were interviewed.

All dollar figures from the SCF in this article are adjusted to 1998 dollars using the "current methods" version of the consumer price index (CPI) for all urban consumers.[1] In an ongoing effort to improve accuracy, the Bureau of Labor Statistics has introduced a number of revisions to the CPI methodology. The current-methods index attempts to extend these changes to earlier years to obtain a series as consistent as possible with the current practices in the official CPI. Because the current-methods index shows a lower rate of past price inflation than does the official CPI, upward adjustments for inflation made to the pre-1998 nominal values are smaller than they would have been under the official CPI.

To provide a measure of the significance of the developments discussed in this article, standard errors due to sampling are given for selected estimates. Space limits prevented the inclusion of the standard errors for all estimates. Although we do not directly address the statistical significance of the results, the article highlights findings that are significant or are interesting in a broader context.

1. For technical information about the construction of this index, see Kenneth J. Stewart and Stephen B. Reed, "Consumer Price Index Research Series Using Current Methods, 1978–98," *Monthly Labor Review*, vol. 122 (June 1999), pp. 29–38. To adjust assets and liabilities to 1998 dollars, the following factors were applied to the earlier survey figures: for 1989, 1.2733; for 1992, 1.1417; and for 1995, 1.0622. To adjust family income for the previous calendar year to 1998 dollars, the following factors were applied: for 1989, 1.3285; for 1992, 1.1697; for 1995, 1.0904; and for 1998, 1.0135.

then declines. Mean income has a similar pattern, but the age group at which it reaches its peak varies somewhat across survey years. In part because income in the survey includes returns on assets, mean and median incomes increase steadily with net worth. Education is also positively associated with income in the surveys.

Income by Demographic Category

Between 1995 and 1998, mean inflation-adjusted family income either held steady or rose for all age groups. The percentage increases were particularly strong for families headed by those in the 55-to-74 age groups. Median income, which is the income of the ''typical'' family, showed a similar pattern, but it also grew substantially for the 45-to-54 age group.

Across education groups, mean income grew between 1995 and 1998 only for families headed by individuals with at least some college education. However, mean incomes for all education groups in 1998 were lower than they had been in 1989.[4] This broad decrease in the face of the rise in the overall mean since 1989 is explained, at least in part, by a large gain in the proportion of all families headed by those with a college degree or at least some college education; these two groups have the highest means. Indeed, median income between 1989 and 1998 rose appreciably only for families headed by college graduates. Between 1995 and 1998, median income grew for all families except those whose head had not completed a high school degree.

Mean and median income rose between 1995 and 1998 both for families with white non-Hispanic respondents and for all other families, but over the 1989 to 1998 interval these measures increased only for the latter group. At the same time, the data show increases in the proportions of respondents reporting that they were white non-Hispanic.[5] The change is largely explained by a decrease in the fraction of respondents reporting themselves as ''Hispanic'' in the SCF.

Families headed by the self-employed showed the strongest gains in mean and median income of all the work-status groups over the 1995 to 1998 period. At the same time, mean income rose in all regions of the country, although the median fell slightly for families in the north central region. Mean income increased over this time for all the net worth groups shown in the table, but the median increased markedly only for families in the top half of the net worth distribution.

Family Saving

Because saving out of current income is an important determinant of changes in family net worth, the 1992 and later surveys have asked respondents whether, over the preceding year, the family spent less than its income, more than its income, or about as much as its income.[6] Though only qualitative, these answers provide a useful indicator of whether families are saving. Asking instead for a specific dollar amount of spending or saving would require substantial additional time from respondents and might lower the rate of response to the survey.

Overall, the proportion of families reporting that they saved in the preceding year rose only slightly between 1995 and 1998 and was still below the level in 1992, near the outset of the current expansion. Between the two most recent surveys, large declines in the saving measure for the youngest and oldest groups were offset by increases for most of the other age groups. Across net worth groups, the measure increased most for the groups with net worth between the 50th and 90th percentiles of the net worth distribution, and it decreased most for the top decile.

The upward movement in the SCF saving indicator contrasts with household saving as measured in the national income and product accounts (NIPA), which declined between 1995 and 1998. However, there are

4. Data from the CPS give a similar result for the 1989–98 period.

5. The SCF question that is used to determine race and Hispanic origin was changed in 1998. In earlier surveys, respondents were asked to choose a single category that described their race or ethnicity best. In 1998, respondents were allowed to choose as many as seven responses, but they were asked to report first the category with which they identified most strongly.

For comparability with the earlier surveys, this article uses only the first 1998 response. Very few respondents gave more than a single response, and more complex treatments of the data do not yield conclusions that are substantively different from those reported in this article.

The proportion of respondents reporting Hispanic origin differs from estimates based on the CPS, most likely because the CPS asks directly about ethnicity in a question separate from the one that asks about race. Thus, in the CPS, even respondents who do not normally identify themselves as Hispanic might provide an ethnic origin that is later classified as Hispanic. The 1998 SCF estimates of the proportion of African-Americans and other minorities are close to CPS estimates.

6. For a more detailed discussion of this variable, see Arthur B. Kennickell, *Saving and Permanent Income,* Finance and Economics Discussion Series 95–41 (Board of Governors of the Federal Reserve System, November 1995). Available at www.federalreserve.gov/pubs/oss/oss2/method.html.

1. Before-tax family income, and distribution of families, by selected characteristics of families, 1989, 1992, 1995, and 1998 surveys, and percentage of families who saved, 1992, 1995, and 1998 surveys

Thousands of 1998 dollars except as noted

Family characteristic	1989			1992			
	Median	Mean	Percentage of families	Median	Mean	Percentage of families who saved	Percentage of families
All families	**32.8** (1.3)	**51.7** (3.6)	**100.0**	**30.4** (.7)	**45.6** (1.1)	**57.1**	**100.0**
Income (1998 dollars)							
Less than 10,000	6.6	6.3	15.1	6.5	6.2	27.9	14.8
10,000–24,999	16.5	16.9	23.9	17.5	17.2	47.8	27.0
25,000–49,999	35.9	36.2	29.7	36.3	36.7	63.3	29.8
50,000–99,999	66.4	68.9	22.7	65.7	68.8	71.4	20.7
100,000 or more	144.8	235.0	8.6	140.4	195.5	83.3	7.6
Age of head (years)							
Less than 35	26.6	35.5	28.1	28.1	34.6	59.1	25.8
35–44	46.5	62.9	21.5	40.9	53.2	56.9	22.8
45–54	49.2	76.8	15.1	47.6	64.7	59.0	16.2
55–64	33.6	60.7	13.9	33.9	56.5	59.2	13.2
65–74	20.6	42.2	12.5	20.4	33.0	54.0	12.6
75 or more	17.6	32.2	8.9	15.7	26.6	49.4	9.4
Education of head							
No high school diploma	17.3	24.8	24.3	14.0	19.9	38.1	20.4
High school diploma	28.8	38.1	32.2	27.2	34.3	56.8	30.0
Some college	37.2	51.8	15.7	31.6	42.2	59.5	17.8
College degree	53.1	90.7	27.8	51.5	74.7	68.1	31.9
Race or ethnicity of respondent							
White non-Hispanic	38.5	59.2	74.8	35.1	50.4	61.1	75.3
Nonwhite or Hispanic	18.6	29.3	25.2	21.1	31.1	44.9	24.7
Current work status of head							
Working for someone else	40.9	52.2	57.0	39.3	50.0	63.2	54.8
Self-employed	47.8	117.6	11.1	51.2	86.8	59.4	10.9
Retired	18.5	30.3	25.2	17.3	26.1	48.2	26.0
Other not working	9.3	17.9	6.7	12.9	23.9	41.3	8.3
Region							
Northeast	37.2	59.3	20.8	37.9	52.8	57.5	20.2
North central	31.8	53.9	24.4	33.0	47.1	61.3	24.4
South	27.9	44.1	34.4	26.9	38.8	54.2	34.6
West	38.5	54.0	20.4	30.2	48.4	56.4	20.9
Housing status							
Owner	42.5	65.0	63.9	39.8	55.9	63.2	63.9
Renter or other	17.5	28.0	36.1	19.5	27.5	46.2	36.1
Percentiles of net worth							
Less than 25	13.3	18.6	25.0	14.9	19.8	37.4	25.0
25–49.9	28.0	32.0	25.0	27.8	31.5	52.4	25.0
50–74.9	40.2	46.0	25.0	37.4	41.7	63.5	25.0
75–89.9	53.1	64.7	15.0	49.1	58.0	70.8	15.0
90–100	99.6	178.0	10.0	92.3	137.0	81.0	10.0

some important conceptual differences between the two measures. First, the underlying SCF question asks only whether the family has spent more, less, or about the same as its income over the past year. Thus, the *amounts* by which families' expenditures differed from their income might have changed appreciably but without necessarily altering the outcome of the SCF variable. Second, the NIPA measure of saving relies on definitions of income and consumption that may not be the same as those used by individual families. Notably, the NIPA measure excludes saving in the form of capital gains, whereas families might include such gains when reporting their saving in the SCF; hence, a strongly rising stock market could well have caused the SCF saving indicator to suggest more saving than the NIPA.

The survey also collects information on motivations for saving (table 2).[7] Several trends appear in the data: Retirement-related reasons for saving have consistently increased in importance since 1989. This result is not surprising given the increased public

7. Although families were asked to report their motives for saving regardless of whether they were currently saving, some families reported only that they do not save. The analysis here is confined to the first reason reported by families that provided a motive. The proportion of families reporting only that they do not save declined almost 2 percentage points from 1995 to 1998.

1.—Continued

Thousands of 1998 dollars except as noted

Family characteristic	1995 Median	1995 Mean	1995 Percentage of families who saved	1995 Percentage of families	1998 Median	1998 Mean	1998 Percentage of families who saved	1998 Percentage of families
All families	**32.7** (.9)	**47.5** (1.1)	**55.2**	**100.0**	**33.4** (1.0)	**53.1** (1.6)	**55.9**	**100.0**
Income (1998 dollars)								
Less than 10,000	6.2	5.6	31.2	15.1	6.2	5.6	30.7	12.6
10,000–24,999	17.9	17.4	41.4	25.4	16.9	17.1	40.2	24.8
25,000–49,999	36.8	36.7	60.4	31.0	35.5	35.9	58.9	28.8
50,000–99,999	67.6	69.3	70.4	21.0	66.0	68.8	71.8	25.2
100,000 and more	147.9	218.9	86.5	7.4	142.4	239.5	81.6	8.6
Age of head (years)								
Less than 35	27.3	33.2	56.4	24.8	27.4	36.1	53.0	23.3
35–44	40.8	51.9	54.3	23.0	42.1	60.0	57.3	23.3
45–54	42.9	70.3	58.0	17.9	50.7	69.7	57.8	19.2
55–64	36.0	57.3	58.0	12.5	38.5	71.7	61.1	12.8
65–74	20.5	39.8	50.0	12.0	24.3	46.6	56.3	11.2
75 or more	17.1	28.2	51.7	9.8	16.7	29.2	48.6	10.2
Education of head								
No high school diploma	15.5	22.3	42.8	18.5	15.5	21.7	39.5	16.5
High school diploma	27.7	37.2	50.6	31.7	29.2	37.0	53.7	31.9
Some college	32.7	43.2	54.1	19.0	35.5	50.8	56.7	18.5
College degree	48.7	75.9	68.2	30.7	54.7	85.5	65.6	33.2
Race or ethnicity of respondent								
White non-Hispanic	35.2	52.2	59.1	77.6	37.7	58.8	59.8	77.7
Nonwhite or Hispanic	21.1	31.1	41.7	22.4	23.3	33.5	42.1	22.3
Current work status of head								
Working for someone else	39.3	51.5	60.4	58.3	40.5	53.5	59.8	59.2
Self-employed	40.3	85.0	63.4	10.3	52.7	109.0	61.1	11.3
Retired	17.9	29.7	46.1	25.0	19.3	32.9	48.6	24.4
Other not working	12.0	19.8	30.6	6.5	11.7	21.9	33.7	5.1
Region								
Northeast	32.7	52.4	52.6	19.8	35.5	60.9	53.5	19.3
North central	33.3	48.4	59.2	23.9	32.9	48.9	58.3	23.6
South	30.2	43.9	54.6	35.1	31.6	49.4	55.0	35.7
West	33.8	47.7	54.0	21.2	36.2	56.9	56.9	21.3
Housing status								
Owner	40.3	58.8	61.3	64.7	43.7	66.6	62.2	66.2
Renter or other	19.6	26.7	44.0	35.3	20.3	26.7	43.4	33.8
Percentiles of net worth								
Less than 25	15.4	19.8	35.8	25.0	15.9	20.4	36.4	25.0
25–49.9	30.5	33.3	51.4	25.0	30.4	33.8	50.1	25.0
50–74.9	37.7	43.3	59.4	25.0	40.5	46.7	61.9	25.0
75–89.9	45.8	56.3	68.5	15.0	56.8	67.9	71.8	15.0
90–100	85.6	149.0	82.6	10.0	88.3	177.2	80.2	10.0

NOTE. In this and the following tables, percentage distributions may not sum to 100 because of rounding. Dollars have been converted to 1998 values with the current-methods consumer price index for all urban consumers (see text box ‘‘The Survey of Consumer Finances’’). See appendix for details on standard errors (shown above, in parentheses in the first row of data, for the means and medians) and for definitions of family and family head.

In providing data on income, respondents were asked to base their answers on the calendar year preceding the interview. In providing data on saving, respondents were asked to base their answers on the year (that is, not specifically the calendar year) preceding the interview. The 1989 survey did not ask families whether they had saved in the preceding year.

discussion of the future of social security, the movement toward greater reliance on account-type pension plans, and the aging of the baby-boom generation. The proportion of families reporting education-related reasons for saving has also risen since 1989. This result likely reflects both the increases in the costs of education and the increasing number of children of the baby-boom generation at or near college age. Over the same period, the reporting of liquidity-related reasons (for example, ‘‘saving for a rainy day’’) and of investment-related reasons declined.[8]

8. The proportion of families citing ‘‘other reasons’’ increased strongly from 1995 to 1998, mostly because of a greater frequency of general responses about the future (for example, ‘‘saving for the future’’).

2. For respondents who gave a reason, distribution of reasons most important for their families' saving, 1989, 1992, 1995, and 1998 surveys

Percent

Reason	1989	1992	1995	1998
Education	9.2	10.3	11.6	11.5
For the family	3.4	3.0	2.8	4.1
Buying own home	5.3	4.5	5.5	4.6
Purchases	8.4	5.8	8.1	5.7
Retirement	20.4	22.0	25.5	34.7
Liquidity	37.5	38.5	35.4	23.2
Investments	8.7	8.7	4.6	2.1
Other	7.0	7.1	6.6	14.1
MEMO				
When asked for a reason, reported do not save	8.4	12.0	6.8	4.9

NOTE. See note to table 1.

NET WORTH

In an acceleration of a trend dating from the 1992 SCF, both mean and median net worth—the difference between families' gross assets and their liabilities—rose strongly between 1995 and 1998 (table 3).[9] Between those two years, mean net worth rose 25.7 percent, and the median rose 17.6 percent.[10] The levels of both of these measures surpassed the levels observed in 1989, toward the end of the last expansion: Compared with the 1989 figures, 1998 mean and median net worth were both nearly 20 percent higher.

Net Worth by Demographic Category

Income and net worth have a clear, positive association in each of the four surveys. As for changes between years, mean net worth declined between 1995 and 1998 for the lowest income group and increased for all other income groups; the strongest gain was for families with incomes of $100,000 or more, a group likely to have had large gains in the stock market. Extending the comparison back to 1989 also shows substantial increases in mean net worth for higher-income families, but it shows an increase of nearly one-third for the group with incomes below $10,000.

The medians for the income groups show a somewhat different pattern than the means. Median net worth increased from 1995 to 1998 for those families in the groups with incomes from $25,000 to $99,999, while slipping somewhat for the other groups. However, compared with the 1989 data, median net worth was higher in 1998 for all families except those with incomes of $100,000 or more. The divergence of the mean and median outcomes for this income group is indicative of a widening dispersion of net worth among the families in this group.

Within any of the surveys, net worth shows the classic, hump-shaped pattern across age groups that is suggested by the life-cycle theory of household saving. In contrast to the mixed changes in net worth over income groups from 1995 to 1998, the changes in means and medians across age groups tended to go in the same direction: Mean net worth rose for all groups, and the median increased for all groups except for families in the less-than-35 age group. The medians rose particularly strongly for the families in the 65-and-older groups. By 1998, mean net worth for each age group was above its 1989 level. However, for the under-55 groups, the medians of net worth were still substantially below their 1989 levels, while the medians for the top two age groups were up notably.

Education tends to be a good predictor of earning ability over the long term, and also of net worth. Recently, the differences in net worth among certain education groups have widened. Over the 1995–98 period, median net worth rose most markedly for families headed by someone with at least some college education, while it fell for families headed by those with less than a high school diploma; indeed, for the latter group, the median has fallen over the period of the four surveys. Since 1989, the gap between families whose head does not have a high school diploma and the families in the other education groups has been widening; the groups with a high school diploma or some college (but not a college degree) have gained the most.

The mean and median net worth of white non-Hispanics rose between 1995 and 1998. The mean net worth of nonwhites and Hispanics also rose, but the median leveled off after increasing steadily between 1989 and 1995. Over the full 1989–98 period, both groups showed gains in the mean and the median. Nevertheless, the net worth of families with nonwhite or Hispanic respondents remained substantially below that of other families.

Families headed by the self-employed had the highest mean and median levels of net worth in each of the surveys. The self-employed group showed the

9. The asset values reported in this article do not account for future tax liabilities. For example, a family that sold its stock would be required to pay taxes on any increase in the value of the stock.

10. Shifts of mean net worth relative to the median provide some information about changes in the concentration of net worth. But the shift alone does not reveal which net worth groups are affected (see Arthur B. Kennickell and R. Louise Woodburn, "Consistent Weight Design for the 1989, 1992, and 1995 SCFs, and the Distribution of Wealth," *Review of Income and Wealth,* series 42, June 1999, pp. 193–215).

largest increases in net worth between 1995 and 1998: 24.0 percent for the mean and 49.9 percent for the median. The median net worth of all the work-status groups grew from 1989 to 1998, although from 1995 to 1998 it declined a small amount for families with heads who were neither working nor retired—including unemployed workers, students, homemakers, and others not currently working for pay.

Across the four principal regions of the country, the mean and median net worth of families increased from 1995 to 1998. However, the longer-term patterns are more mixed, reflecting such factors as differing cyclical variations in labor and housing markets across regions.

Mean and median net worth of homeowners moved up between 1995 and 1998, surpassing the 1989 levels for the first time since that year. For renters, mean and median net worth slipped a bit over the recent three-year period. Over the nine-year period, the mean net worth of renters declined about 10 percent, while their median net worth rose about 68 percent from a very low initial level. As noted later in this article, the proportion of homeowners has increased notably in recent years, and this movement may have entailed the transition of wealthier renters into home ownership.

ASSETS

Over the four surveys, the share of financial assets in families' total asset holdings has risen steadily, from 30.4 percent in 1989 to 40.6 percent in 1998 (table 4). Ownership and holdings of a broad spectrum of financial assets rose, but direct and indirect holdings of stocks were the most important factor in the rising share of financial assets (tables 5 and 6). By definition, the share of nonfinancial assets—mainly vehi-

3. Family net worth, by selected characteristics of families, 1989, 1992, 1995, and 1998 surveys

Thousands of 1998 dollars

Family characteristic	1989		1992		1995		1998	
	Median	Mean	Median	Mean	Median	Mean	Median	Mean
All families	**59.7** (5.2)	**236.9** (50.1)	**56.5** (3.3)	**212.7** (13.8)	**60.9** (2.4)	**224.8** (14.9)	**71.6** (4.1)	**282.5** (16.4)
Income (1998 dollars)								
Less than 10,000	1.9	30.5	2.9	32.1	4.8	46.6	3.6	40.0
10,000–24,999	22.8	72.0	27.1	69.8	31.0	80.3	24.8	85.6
25,000–49,999	58.1	134.2	55.6	131.4	56.7	124.0	60.3	135.4
50,000–99,999	131.4	247.4	129.9	245.6	126.6	258.1	152.0	275.5
100,000 or more	542.1	1,378.3	481.9	1,300.8	511.4	1,411.9	510.8	1,727.8
Age of head (years)								
Less than 35	9.9	60.5	10.4	53.1	12.7	47.4	9.0	65.9
35–44	71.8	188.2	50.9	152.7	54.9	152.8	63.4	196.2
45–54	125.7	351.7	89.3	304.4	100.8	313.0	105.5	362.7
55–64	124.6	391.4	130.2	384.9	122.4	404.7	127.5	530.2
65–74	97.1	356.0	112.3	326.1	117.9	369.3	146.5	465.5
75 or more	92.2	307.4	99.2	244.4	98.8	273.8	125.6	310.2
Education of head								
No high school diploma	30.7	106.0	21.3	80.2	24.0	89.6	20.9	79.1
High school diploma	46.9	142.0	43.9	127.7	54.7	141.3	53.8	157.8
Some college	58.5	237.2	65.9	195.8	49.7	201.2	73.9	237.8
College degree	141.4	460.6	112.1	387.0	110.9	407.2	146.4	528.2
Race or ethnicity of respondent								
White non-Hispanic	90.5	289.6	79.5	253.5	81.2	265.9	94.9	334.4
Nonwhite or Hispanic	8.5	80.6	13.7	88.7	16.8	82.5	16.4	101.7
Current work status of head								
Working for someone else	48.3	145.0	44.7	139.6	51.9	145.2	52.4	168.9
Self-employed	216.0	829.0	164.7	682.3	165.5	742.0	248.1	919.8
Retired	84.2	232.5	80.7	214.0	86.2	239.4	113.0	307.2
Other not working	1.0	52.7	4.5	72.2	3.9	62.9	3.6	76.5
Region								
Northeast	111.1	275.1	73.2	240.0	88.0	266.9	94.2	302.4
North central	66.9	238.8	65.0	198.0	69.2	210.0	80.3	248.8
South	44.9	167.6	39.4	160.4	46.6	197.6	61.3	267.5
West	58.3	312.6	81.4	290.2	58.1	247.1	61.3	327.1
Housing status								
Owner	127.7	342.6	112.8	307.4	110.5	321.3	132.1	403.5
Renter or other	2.5	50.0	3.7	45.1	5.2	47.9	4.2	45.1

NOTE. See note to table 1.

cles, real estate, and businesses—fell correspondingly (table 7).

Overall, the percentage of families with assets moved up slightly, to 96.8 percent, between the 1995 and 1998 surveys (table 8). With ownership of assets in both surveys at 100 percent for families with incomes of $50,000 or more, this movement was the result of small increases for the lowest income groups. By age of family head, the ownership rate declined for the 45-to-54 group and the oldest group. Increases in median amounts of total assets were most pronounced for families with incomes of $50,000 or more, families headed by those aged 55 and older, and families in the top half of the net worth distribution.

Financial Assets

Largely continuing earlier trends, the composition of families' financial assets shifted from 1995 to 1998 (table 4). The share of financial assets held in transaction accounts and certificates of deposit fell sharply, to 15.7 percent in 1998—down from 19.7 percent in 1995 and 29.3 percent in 1989. The shares of savings bonds, other bonds, and the "other" category of financial assets have also fallen since 1989. Growth over the nine-year period was concentrated among stocks, mutual funds, tax-deferred retirement accounts, and other managed assets; together these assets accounted for 48.4 percent of financial assets in 1989 and 71.3 percent in 1998.

In both the 1995 and 1998 surveys, the proportion of families having financial assets rose with income; across age groups, the proportion owning financial assets does not vary much except for the lower frequency of ownership among the youngest age group (table 5). Within each survey, the median holding among families having such assets rose strongly with income. The median holding generally rose and then fell with age.

The overall proportion of families having any financial asset rose almost 2 percentage points from 1995 to 1998. Among all the demographic groups not already at or near 100 percent, the percentage of families with financial assets moved up except among families headed by those aged 75 or more. The largest increases were among families in the 55-to-64 age group, in the nonwhite or Hispanic group, among the group of families headed by someone neither working nor retired, among renters, and among families in the bottom 25 percent of the net worth distribution.

For families with financial assets, the median holding rose 35.8 percent overall across the three-year period.[11] Gains were spread broadly, but the largest were among families with incomes of $25,000 or more, families in the 65-to-74 age group, homeowners, families headed by the self-employed or retirees, with white non-Hispanic respondents, and those in the upper half of the distribution of net worth. The median level of financial assets fell for families with incomes of less than $25,000, those in the younger-than-35 group, and those that were renters.

Transaction Accounts and Certificates of Deposit

In 1998, 90.5 percent of families had some type of transaction account—a category comprising checking, savings, and money market deposit accounts, money market mutual funds, and call accounts at brokerages. The families without such accounts in 1998 were disproportionately likely to have low incomes; to be renters; to be in the bottom quarter of the distribution of net worth; to be headed by a person younger than 35 or at least 75; to be headed by a person neither working nor retired; and to have a nonwhite or Hispanic respondent (see box "Families without a Checking Account").

4. Value of financial assets of all families, distributed by type of asset, 1989, 1992, 1995, and 1998 surveys
Percent

Type of financial asset	1989	1992	1995	1998
Transaction accounts	19.1	17.5	14.0	11.4
Certificates of deposit	10.2	8.1	5.7	4.3
Savings bonds	1.5	1.1	1.3	0.7
Bonds	10.2	8.4	6.3	4.3
Stocks	15.0	16.5	15.7	22.7
Mutual funds (excluding money market funds)	5.3	7.7	12.7	12.5
Retirement accounts	21.5	25.5	27.9	27.5
Cash value of life insurance	6.0	6.0	7.2	6.4
Other managed assets	6.6	5.4	5.9	8.6
Other	4.8	3.8	3.4	1.7
Total	100	100	100	100
Memo				
Financial assets as a percentage of total assets	30.4	31.5	36.6	40.6

Note. For this and following tables, see text for definition of asset categories. Also see note to table 1.

11. In discussing the dollar value of families' holdings of detailed components of net worth, we present only the median amounts held for those having such items. In general, the median is a statistically more robust indicator of the typical amount held than is the mean when relatively few members of a group hold an item or when a relatively large fraction of the total holdings is concentrated among a small proportion of families.

Families without a Checking Account

The portion of families without any type of transaction account has fallen in each SCF since 1989. In 1989, 14.9 percent of families did not have a transaction account. By 1998, the figure was 9.5 percent.[1]

The portion of families without a checking account also fell continuously, from 18.7 percent in 1989 to 13.2 percent in 1998 (data not shown). Among these families in 1998, 47.9 percent had owned a checking account at some time in the past. The great majority of families without a checking account—82.6 percent—had incomes of less than $25,000, and 44.7 percent of them had incomes of less than $10,000; 60.9 percent of them were headed by individuals under the age of 45, and 35.6 percent of them by those under 35; 57.1 percent of these families were nonwhite or Hispanic.

The survey asked all families without checking accounts to give the reason for not having an account (table). The proportion of families reporting that they did not like banks moved up from 15.3 percent in 1992 to 18.6 percent in 1995, and it stayed near this level in 1998. The proportion of families reporting that they did not write enough checks to make an account worthwhile edged up, to 28.4 percent in 1998, but was still below the levels seen in the 1989 and 1992 surveys. Altogether, 19.6 percent of families in 1998 reported that either minimum balances or service charges were too high. Only 1.2 percent reported that bank location or banking hours deterred them from having a checking account.

The pattern of responses for families that once had a checking account differs substantially from that of other families without accounts. Those who had accounts in the past were much more likely to report that fees were a deterrent and much less likely to report that they did not write enough checks or that they did not like banks.

1. For the definition of transaction account, see text. For a discussion of the ways that lower-income families obtain checking and credit services and the effects that developments in electronic transactions may have on such families, see Jeanne M. Hogarth and Kevin H. O'Donnell, "Banking Relationships of Lower-Income Families and the Governmental Trend toward Electronic Payment," *Federal Reserve Bulletin*, vol. 85 (July 1999), pp. 459–73.

Distribution of reasons cited by respondents for their families' not having a checking account, by reason, 1989, 1992, 1995, and 1998 surveys

Percent

Reason	1989	1992	1995	1998
Do not write enough checks to make it worthwhile	34.4	30.4	25.3	28.4
Minimum balance is too high	7.7	8.7	8.8	8.6
Do not like dealing with banks	15.0	15.3	18.6	18.5
Service charges are too high	8.6	11.3	8.4	11.0
Cannot manage or balance a checking account	5.0	6.5	8.0	7.2
No bank has convenient hours or location	1.2	.8	1.2	1.2
Do not have enough money	21.2	21.2	20.0	12.9
Credit problems	*	.7	1.4	2.7
Do not need/want an account	*	3.2	4.9	6.3
Other	6.8	1.9	3.5	3.1
Total	100	100	100	100

*Responses not coded separately in 1989.

From 1995 to 1998 the proportion of families having transaction accounts rose 3.5 percentage points.[12] Ownership of transaction accounts rose for every group that had less than a 100 percent ownership rate except for families in the 75-or-older group, for whom the ownership rate fell 3.5 percentage points. Gains in ownership were particularly large for the nonwhite or Hispanic group (7.7 percentage points), for families headed by those neither working nor retired (11.0 percentage points), and for families in the bottom quarter of the net worth distribution (8.4 percentage points).

Overall, median holdings of transaction accounts among those who had such accounts rose about one-third, to $3,100; holdings were steady or rose for all demographic groups considered here except families with incomes of less than $10,000 and renters.

Ownership of certificates of deposit, a traditional savings vehicle, also edged up over the three-year period, though it remained below the 1989 level. Increases for families in the bottom 90 percent of the net worth distribution were offset by a large decline in ownership by the wealthiest 10 percent of families. Overall, for those having certificates of deposit, the median value of holdings rose 41.5 percent over the period.

Savings Bonds and Other Bonds

The percentage of all families owning savings bonds fell substantially between 1995 and 1998. The ownership rate declined for every demographic group; the median holding among those with savings bonds hardly changed.

Other types of bonds—excluding bonds held through mutual funds, retirement accounts, and other managed assets—were held by only 3.0 percent of families in 1998, virtually unchanged from 1995.

12. This rise was driven in part by a notable increase in the proportion of families with savings accounts.

5. Family holdings of financial assets, by selected characteristics of families and type of asset, 1995 and 1998 surveys

A. 1995 Survey of Consumer Finances

Family characteristic	Trans-action accounts	Certifi-cates of deposit	Savings bonds	Bonds	Stocks	Mutual funds	Retire-ment accounts	Life insurance	Other managed assets	Other	Any financial asset
	Percentage of families holding asset										
All families	**87.0**	**14.3**	**22.8**	**3.1**	**15.2**	**12.3**	**45.2**	**32.0**	**3.9**	**11.1**	**91.0**
Income (1998 dollars)											
Less than 10,000	59.2	7.9	5.3	*	2.3	1.3	7.9	15.2	*	9.5	67.4
10,000–24,999	82.3	15.6	12.4	*	8.4	4.9	25.1	24.8	3.1	8.3	87.8
25,000–49,999	93.4	13.8	25.7	2.7	13.9	12.2	52.5	32.3	4.3	13.1	97.0
50,000–99,999	98.7	16.2	38.0	4.6	24.7	20.9	71.6	44.8	5.3	11.6	99.5
100,000 or more	99.8	20.0	38.2	14.6	43.6	36.7	84.3	52.6	8.1	14.7	100.0
Age of head (years)											
Less than 35	80.4	7.2	20.4	*	10.8	8.0	40.7	22.8	1.6	13.8	86.9
35–44	87.2	8.1	31.0	1.7	14.6	11.2	54.3	29.3	3.5	10.9	91.8
45–54	88.8	12.5	25.3	4.5	17.7	16.3	57.4	38.4	3.0	12.9	92.8
55–64	88.4	17.1	20.3	3.1	15.0	16.3	50.9	37.4	7.7	9.3	90.8
65–74	91.3	24.0	17.0	5.6	18.6	15.0	36.6	37.5	5.9	10.0	92.6
75 or more	93.2	34.7	15.3	7.0	19.7	10.3	15.7	35.8	5.2	5.4	94.2
Race or ethnicity of respondent											
White non-Hispanic	92.5	16.7	26.2	3.8	18.2	14.8	49.1	34.0	4.8	11.7	94.9
Nonwhite or Hispanic	68.1	6.2	10.8	0.6	5.1	3.6	31.5	24.8	1.0	9.1	77.4
Current work status of head											
Working for someone else	89.6	10.4	26.6	2.5	15.3	12.4	55.8	32.2	3.6	11.8	94.1
Self-employed	91.5	18.7	25.8	5.3	18.7	19.0	50.7	41.9	3.1	16.8	94.6
Retired	86.6	23.4	15.3	4.2	16.5	11.5	24.9	32.0	5.3	7.1	88.7
Other not working	58.1	7.8	12.6	*	4.3	4.3	18.4	13.7	*	11.5	65.2
Housing status											
Owner	95.0	17.4	28.3	4.3	19.2	16.0	54.3	38.8	5.0	9.5	96.5
Renter or other	72.4	8.7	12.7	.9	7.9	5.5	28.4	19.4	1.9	14.0	80.8
Percentiles of net worth											
Less than 25	63.7	1.8	8.4	*	2.9	1.9	15.1	11.3	*	9.1	71.6
25–49.9	89.1	8.7	19.9	*	8.8	5.3	41.9	27.4	1.9	10.7	94.3
50–74.9	96.1	17.7	27.3	1.4	13.5	11.3	51.8	38.4	3.4	11.3	97.9
75–89.9	98.7	27.1	34.8	4.9	29.2	23.4	66.3	47.3	6.3	10.9	100.0
90–100	99.7	32.2	36.5	18.2	45.6	41.8	80.2	56.1	14.5	17.3	100.0
	Median value of holdings for families holding asset (thousands of 1998 dollars)										
All families	**2.3**	**10.6**	**1.1**	**31.1**	**9.6**	**21.2**	**18.1**	**5.3**	**31.9**	**3.2**	**16.5**
Income (1998 dollars)											
Less than 10,000	.7	7.4	.3	*	1.6	26.6	5.3	2.1	*	2.1	1.4
10,000–24,999	1.3	10.6	.8	*	6.4	9.2	11.1	3.2	15.9	1.9	5.9
25,000–49,999	2.0	10.6	.7	30.8	6.4	13.8	10.6	5.0	22.3	2.1	13.3
50,000–99,999	4.4	13.8	1.3	15.9	7.4	17.8	24.6	7.4	42.5	5.0	44.0
100,000 or more	15.9	19.1	1.6	61.6	23.4	63.4	88.2	13.8	65.9	13.8	218.5
Age of head (years)											
Less than 35	1.3	5.6	.5	*	3.2	5.8	6.4	3.7	4.8	1.1	5.7
35–44	2.1	5.6	1.1	11.7	4.8	10.6	15.6	5.6	11.5	2.1	14.6
45–54	3.2	12.7	1.1	26.6	10.6	22.3	29.7	8.3	60.3	5.3	29.7
55–64	3.3	14.9	1.6	10.6	20.6	59.5	33.6	5.6	53.1	10.6	34.8
65–74	3.5	21.2	1.6	53.1	21.2	58.4	30.3	5.3	37.2	9.6	22.5
75 or more	5.3	13.8	5.1	42.5	19.1	53.1	25.0	5.3	69.0	37.2	24.3
Race or ethnicity of respondent											
White non-Hispanic	2.6	11.2	1.1	31.1	9.8	22.3	19.5	5.3	31.9	4.2	19.9
Nonwhite or Hispanic	1.5	10.6	0.5	28.7	2.5	6.8	12.7	5.6	6.4	1.4	6.2
Current work status of head											
Working for someone else	2.1	8.5	1.0	18.9	6.1	13.8	17.0	5.8	15.4	2.1	15.6
Self-employed	4.8	17.0	.9	53.1	19.1	26.6	26.0	6.4	45.7	4.2	26.5
Retired	3.2	16.5	2.7	41.4	20.2	53.1	27.6	4.5	53.1	10.6	20.6
Other not working	.6	9.0	0.4	*	5.5	24.4	12.7	3.7	*	5.3	2.7
Housing status											
Owner	3.2	11.7	1.1	41.4	10.6	23.4	21.5	6.4	37.2	5.3	26.0
Renter or other	1.3	8.5	1.1	7.4	3.9	10.6	7.6	3.7	14.9	1.7	4.9
Percentiles of net worth											
Less than 25	.6	1.4	.2	*	.6	2.1	1.3	1.3	*	.9	1.1
25–49.9	1.5	5.3	.6	*	1.9	3.7	8.0	3.6	9.0	1.6	8.9
50–74.9	2.7	10.6	1.1	10.6	5.0	10.6	17.0	5.3	11.5	4.2	26.2
75–89.9	7.0	15.9	1.6	21.2	10.6	22.3	37.7	7.4	26.6	10.6	88.6
90–100	20.7	37.2	2.9	74.4	53.1	86.0	104.1	18.1	125.3	31.9	341.0

5.—Continued

B. 1998 Survey of Consumer Finances

Family characteristic	Trans-action accounts	Certifi-cates of deposit	Savings bonds	Bonds	Stocks	Mutual funds	Retire-ment accounts	Life insurance	Other managed assets	Other	Any financial asset
	Percentage of families holding asset										
All families	**90.5**	**15.3**	**19.3**	**3.0**	**19.2**	**16.5**	**48.8**	**29.6**	**5.9**	**9.4**	**92.9**
Income (1998 dollars)											
Less than 10,000	61.9	7.7	3.5	*	3.8	1.9	6.4	15.7	*	8.0	70.6
10,000–24,999	86.5	16.8	10.2	1.3	7.2	7.6	25.4	20.9	4.9	8.2	89.9
25,000–49,999	95.8	15.9	20.4	2.4	17.7	14.0	54.2	28.1	3.9	10.2	97.3
50,000–99,999	99.3	16.4	30.6	3.3	27.7	25.8	73.5	39.8	8.0	9.1	99.8
100,000 or more	100.0	16.8	32.3	12.2	56.6	44.8	88.6	50.1	15.8	12.7	100.0
Age of head (years)											
Less than 35	84.6	6.2	17.2	1.0	13.1	12.2	39.8	18.0	1.9	10.1	88.6
35–44	90.5	9.4	24.9	1.5	18.9	16.0	59.5	29.0	3.9	11.8	93.3
45–54	93.5	11.8	21.8	2.8	22.6	23.0	59.2	32.9	6.5	9.1	94.9
55–64	93.9	18.6	18.1	3.5	25.0	15.2	58.3	35.8	6.5	8.4	95.6
65–74	94.1	29.9	16.1	7.2	21.0	18.0	46.1	39.1	11.8	7.3	95.6
75 or more	89.7	35.9	12.0	5.9	18.0	15.1	16.7	32.6	11.6	6.4	92.1
Race or ethnicity of respondent											
White non-Hispanic	94.7	17.9	22.2	3.7	22.1	18.8	53.7	32.1	7.1	9.7	96.3
Nonwhite or Hispanic	75.8	6.4	9.2	.4	9.1	8.4	32.0	20.8	1.7	8.3	81.2
Current work status of head											
Working for someone else	92.7	11.1	21.8	1.9	19.5	16.6	58.9	27.5	4.2	9.4	94.8
Self-employed	95.4	11.7	20.2	5.4	26.5	24.8	53.5	39.5	8.7	14.1	96.9
Retired	87.2	28.8	14.4	5.1	17.1	14.8	28.8	32.4	9.9	6.8	90.3
Other not working	69.1	7.6	11.8	*	8.8	4.8	17.5	17.6	*	10.9	75.2
Housing status											
Owner	96.2	18.9	23.3	3.8	24.9	21.0	58.4	36.9	7.7	8.7	97.5
Renter or other	79.2	8.3	11.5	1.3	8.0	7.5	30.1	15.2	2.4	10.8	84.1
Percentiles of net worth											
Less than 25	72.1	3.0	7.0	*	3.1	2.1	18.4	10.8	*	7.9	78.0
25–49.9	91.4	9.8	16.3	*	9.4	8.7	44.2	23.7	2.3	10.0	94.7
50–74.9	98.5	19.7	23.9	2.2	18.8	15.1	56.4	35.6	5.9	8.3	99.1
75–89.9	99.7	30.0	27.9	3.4	36.3	35.7	71.9	45.7	10.1	10.2	99.9
90–100	100.0	26.9	33.1	16.9	58.9	46.4	82.9	52.1	22.2	13.1	100.0
	Median value of holdings for families holding asset (thousands of 1998 dollars)										
All families	**3.1**	**15.0**	**1.0**	**44.8**	**17.5**	**25.0**	**24.0**	**7.3**	**31.5**	**3.0**	**22.4**
Income (1998 dollars)											
Less than 10,000	.5	7.0	1.8	*	14.0	6.0	7.5	3.0	*	.5	1.1
10,000–24,999	1.3	20.0	1.0	8.4	10.0	26.0	8.0	5.0	30.0	1.1	4.8
25,000–49,999	2.5	14.5	.6	25.0	8.0	11.0	13.0	5.0	15.0	2.0	17.6
50,000–99,999	6.0	13.3	1.0	19.0	15.0	25.0	31.0	9.5	32.0	5.0	57.2
100,000 or more	19.0	22.0	1.5	108.0	55.0	65.0	93.0	18.0	100.0	25.0	244.3
Age of head (years)											
Less than 35	1.5	2.5	.5	3.0	5.0	7.0	7.0	2.7	19.4	1.0	4.5
35–44	2.8	8.0	.7	55.3	12.0	14.0	21.0	8.5	25.0	2.5	22.9
45–54	4.5	11.5	1.0	31.7	24.0	30.0	34.0	10.0	39.3	6.0	37.8
55–64	4.1	17.0	1.5	100.0	21.0	58.0	46.8	9.5	65.0	10.0	45.6
65–74	5.6	20.0	2.0	52.0	50.0	60.0	38.0	8.5	41.3	6.0	45.8
75 or more	6.1	30.0	5.0	18.8	50.0	59.0	30.0	5.0	30.0	8.2	36.6
Race or ethnicity of respondent											
White non-Hispanic	3.7	17.0	1.0	46.0	20.0	29.0	26.0	7.5	32.0	4.0	29.9
Nonwhite or Hispanic	1.5	6.3	.7	14.2	9.0	10.0	13.0	5.0	23.0	1.0	6.4
Current work status of head											
Working for someone else	2.7	9.0	.7	15.0	10.0	16.0	20.0	7.0	30.0	1.8	19.0
Self-employed	6.3	22.0	.9	150.0	52.0	40.0	49.5	11.5	39.3	7.0	45.0
Retired	5.0	24.0	2.5	50.0	50.0	55.0	31.0	6.0	32.0	7.0	32.8
Other not working	1.0	10.0	.8	*	11.0	17.5	15.0	5.0	*	0.5	2.5
Housing status											
Owner	5.0	18.0	1.0	41.5	20.0	30.0	30.0	8.0	32.0	5.0	41.2
Renter or other	1.1	10.0	.6	50.0	8.0	12.0	7.5	5.0	23.0	1.0	3.4
Percentiles of net worth											
Less than 25	.6	1.5	.2	*	.7	1.5	2.0	1.2	*	.5	1.1
25–49.9	1.7	6.2	.5	*	3.0	6.0	8.1	5.0	10.0	1.8	10.4
50–74.9	4.8	15.0	1.0	10.0	8.0	14.0	28.0	7.0	21.4	6.0	42.7
75–89.9	10.5	25.0	2.0	25.0	26.3	35.3	59.8	10.0	23.4	7.0	144.4
90–100	23.0	44.0	2.0	100.0	85.0	107.0	125.0	20.0	120.0	20.0	456.8

NOTE. See note to table 1.
* Ten or fewer observations.

At the same time, the median amount of bonds among families that had them rose 44.1 percent. Changes for the different demographic groups were quite mixed, but among the groups with relatively large holdings in 1995—the top income and top net worth groups—ownership moved down while the median holding rose substantially. The increase in the median holding for families headed by the self-employed was also notable. Given the sparseness of bond ownership among most other groups, estimates of the amounts of their holdings are subject to a relatively high level of statistical variability.

Publicly Traded Stocks

The fraction of families having direct ownership of publicly traded stocks—that is, stocks other than those held through mutual funds, retirement accounts, or other managed assets—rebounded to 19.2 percent in 1998; the proportion had fallen to 15.2 percent in 1995 from about 17 percent in both 1989 and 1992. Although the largest increases in ownership were in the highest income and net worth groups, almost all of the groups showed some increase. Among families with incomes from $25,000 to $49,999, the proportion owning stock rose 3.8 percentage points. For those in the 55-to-64 age group, the increase was 10.0 percentage points. Some of the additional ownership may be attributable to the increasing ease of individual stock trading.

Fueled by a rising stock market, the median amount of stock held by those having direct holdings rose 82.3 percent, from $9,600 in 1995 to $17,500 in 1998.[13] Most of the demographic groups also had large proportional increases. Among the work-status groups, the increases in holdings were most notable for the self-employed and retired. Of all the demographic categories, only one, the 55-to-64 age group, had minimal growth in their holdings over the period, probably because of an influx of new owners with relatively small holdings.

13. During the interview period of the 1998 survey—July to December—the stock market, as measured by the Wilshire index of 5000 companies, slipped from an average of 10,770 in July to 9,270 in September but bounced back to an average of 10,840 in December. This variation raises a concern that the net worth values reported in the survey may be affected by the date of the interview. Regression analysis of the 1998 survey data suggests that the reporting of equity values was not significantly affected by fluctuations in the value of the market index except for families that were relatively active stock traders. Reporting by other families may have been based on brokerage statements, which are typically mailed quarterly.

Mutual Funds

Continuing a trend going back at least to 1989, the proportion of families owning mutual funds of any type (excluding money market funds or funds held through retirement accounts or other managed assets) rose 4.2 percentage points, to 16.5 percent, between 1995 and 1998. Ownership increased substantially for most of the demographic groups, and it eased off only for the families in the 55-to-64 age group, which had a particularly large rise in the fraction of families with directly held stock.

Between 1995 and 1998, median holdings of mutual funds among those who had them rose 17.9 percent. The changes in holdings over demographic groups were more mixed than was the case for directly held stocks, but increases were nonetheless broadly spread. As was the case with bonds and directly held stocks, the increase among the work-status groups was particularly notable for the self-employed. Among the net worth groups, the largest proportional increases were for families between the 25th and 90th percentiles of the distribution.

Retirement Accounts

Continuing earlier trends, the ownership of tax-deferred retirement accounts rose broadly, from 45.2 percent of families in 1995 to 48.8 percent in 1998.[14] Across the income groups, ownership declined only among the under-$10,000 group; however, the shrinkage of this group over the three years suggests that its composition may have changed in important ways. Ownership also declined for the younger-than-35 and neither-working-nor-retired groups. Ownership of retirement accounts increased 4.6 percentage points for families with white non-Hispanic respondents, while it rose ½ percentage point for other families.

14. The tax-deferred retirement accounts include individual retirement accounts (IRAs), Keogh accounts, and certain employer-sponsored accounts. The amounts held in retirement accounts may be invested in virtually any asset, including stocks, bonds, mutual funds, options, and real estate.

Here, employer-sponsored accounts are those from current jobs held by the family head and that person's spouse or partner as well as those from past jobs held by them. The accounts from current jobs are restricted to those in which loans or withdrawals can be made, such as 401(k) accounts; those from past jobs are restricted to accounts from which the family expects to receive the account balance in the future. These restrictions on the types of accounts are intended to confine the analysis to amounts that are portable across jobs and to which families will ultimately have full access. Earlier articles on the survey in the *Federal Reserve Bulletin* included only the accounts from current jobs.

For families with tax-deferred retirement accounts, median holdings jumped 32.6 percent. Increases appeared in all the demographic groups except renters and families with incomes from $10,000 to $24,999. The median value of holdings of the white non-Hispanic group rose considerably, but for the nonwhite or Hispanic group, median holdings only edged up.

Tax-deferred retirement accounts are only a part of the retirement assets that families have. Many families also have coverage under defined-benefit pension plans, which typically provide annuity income at retirement based on workers' salaries and years of service. Most families also have some entitlement to social security retirement income. Unfortunately, future retirement income from these sources is difficult to value because it depends crucially on assumptions about future events and conditions—work decisions, earnings, inflation rates, discount rates, mortality, and so on. Because of the lack of widely agreed standards for these assumptions, this article does not include a measure of the present value of such income in families' net worth.[15]

However, the survey does provide general information on pension coverage, which consists of defined-benefit plans and defined-contribution—that is, account-type—plans. According to the 1998 survey, 41.0 percent of families had some type of pension coverage through a current job of either the family head or the spouse or partner of that person; the level was 39.1 percent in 1995 (not shown in table). Continuing a trend away from defined-benefit pension plans, the share of families with pension coverage through a current job that participated in a defined-benefit plan slipped from 47.5 percent in 1995 to 42.9 percent in 1998, while the share participating in an account-type plan rose from 73.9 percent in 1995 to 79.4 percent in 1998. The share with both types of plans went up from 21.4 percent in 1995 to 22.3 percent in 1998.

In many account-type pension plans, contributions may be made by the employer, the worker, or both. In some cases these contributions represent a substantial amount of saving, though workers may offset this saving by reducing their saving in other forms. The employer's contributions also represent additional income for the worker. In 1998, 82.7 percent of families with account-type pension plans on a current job had employers who made a contribution to the plan, and 86.6 percent of families with such plans made contributions themselves.

Participation in defined-contribution plans is usually voluntary. In 1998, 22.7 percent of family heads who were eligible to participate in such a plan failed to do so, down from 26.0 percent in 1995. The data indicate that this choice is related strongly to income: Heads of families with incomes of less than $25,000 were less likely to participate than others. Among the family heads who were eligible but chose not to participate, 40.2 percent were covered by a defined-benefit plan.

Cash Value Life Insurance

Cash value life insurance combines insurance coverage in the form of a death benefit with an investment vehicle. Some types of cash value policies offer a high degree of choice on the investments. Like returns earned within IRAs, Keoghs, and personal annuities, investment returns on cash value life insurance are typically shielded from taxation until money is withdrawn. Ownership of cash value policies declined 2.4 percentage points between 1995 and 1998. This decline continued a downward trend from the 1989 survey, and it was shared by almost every demographic group. This movement may reflect several factors. First, other investments may have become more attractive to consumers than cash value insurance. Second, term life insurance—which pays a death benefit if the insured dies within the term of the coverage but pays nothing otherwise—has been competitive with cash value insurance; in addition, advances in the availability of information may have made it easier for consumers to compare costs. Finally, consumers' demand for life insurance may have eased somewhat: As with the ownership of cash value insurance, ownership of any type of life insurance policy has slipped, from 75.1 percent of families in 1989 to 69.2 percent in 1998.

For families that held cash value insurance, the median cash value increased 37.7 percent between 1995 and 1998. The median also rose for all groups except the youngest and oldest age classes, families with incomes from $25,000 to $49,999, and families in the bottom quarter of the distribution of net worth. The decline in ownership, taken together with the increase in the median holding, suggests that the typical family owning this asset is using it more intensively as an investment vehicle.

15. For one possible calculation of net worth that includes the annuity value of pension benefits and social security retirement payments, see Arthur B. Kennickell and Annika E. Sundén, *Pensions, Social Security, and the Distribution of Wealth,* Finance and Economics Discussion Series 1997–55 (Board of Governors of the Federal Reserve System, October 1997). Papers in this series from 1996 to date are available at www.federalreserve.gov/pubs/feds.

Other Managed Assets

Ownership of other managed assets—including personal annuities and trusts with an equity interest and managed investment accounts—rose from 3.9 percent of families in 1995 to 5.9 percent in 1998. Part of the rise is attributable to the increased holding of personal annuities with an equity interest: 4.5 percent of families had such annuities in 1998, up from 3.9 percent in 1995.[16] Most groups increased their ownership of other managed assets over the three-year period, with a particularly notable rise for families with incomes of $100,000 or more and those in the top 10 percent of the distribution of net worth.

Median holdings for those having other managed assets declined slightly. In light of the sparseness of ownership for many of the groups, much of the large change observed in various groups is likely attributable to sampling variation.

Other Financial Assets

For the other financial assets—a heterogeneous category including oil and gas leases, futures contracts, royalties, proceeds from lawsuits or estates in settlement, and loans made to others—ownership fell 1.7 percentage points from 1995 to 1998. The decline was broadly spread across demographic groups. For those having such assets, the median holding dipped about $200 from the 1995 level. The pattern of changes across the demographic groups appears to have no straightforward interpretation.

Publicly traded companies have increasingly been offering stock options to their employees as a form of compensation.[17] Although such stock options, when executed, may make an appreciable contribution to family net worth, the survey did not specifically ask for the value of these options because their valuation is not straightforward until their exercise date.[18] Instead, in 1998 the survey for the first time asked whether the family head or that person's spouse or partner had been given stock options by an employer during the preceding year. Overall, 11.2 percent of families in the 1998 survey reported having received stock options.

Direct and Indirect Holdings of Publicly Traded Stocks

Families may hold stock in publicly traded companies in many different ways—through direct ownership of shares or through mutual funds, retirement accounts, or other managed assets—and information about each of these asset types is collected separately in the SCF. When all these forms of stock ownership are combined, the data show considerable growth in stock ownership in every survey since 1989 (table 6). In 1998, 48.8 percent of families owned stock equity through some means. Since 1989, the ownership rate has grown 17.2 percentage points, with nearly half of the gain since 1995. Between 1995 and 1998, ownership rose for all family income and age groups; among these, the increases were largest in the $50,000–$99,999 income group and the 55-to-64 age group.

Not surprisingly, given the robust growth in stock prices, the median value of stock holdings among those having any rose strongly—from $15,400 in 1995 to $25,000 in 1998, a 62.3 percent increase. Moreover, the proportion of financial assets attributable to all forms of stock ownership also moved up, from 40.0 percent in 1995 to 53.9 percent in 1998. The rise reflects both an increase in the market valuation of stocks and the increased tendency of families to hold stock.

Nonfinancial Assets

Nonfinancial assets as a proportion of the total assets of all families fell from 69.6 percent in 1989 to 59.4 percent in 1998 (table 7). The proportion of nonfinancial assets attributable to the primary residence or other residential property held steady at about 55 percent over the 1989–98 period. At the same time, the part attributable to vehicles and net equity in privately owned businesses rose slightly, while the proportion attributable to net equity in nonresidential properties and other nonfinancial assets fell. The patterns across demographic groups in 1995 and 1998 are similar to those seen for financial assets: Ownership and median holdings rise with income; by age group, they rise initially and then decline (table 8).

Overall, the proportion of families with any type of nonfinancial asset slipped a bit, from 90.9 percent in

16. In 1998, the SCF questionnaire was changed so that information on annuities was collected separately from information on trusts and managed investment accounts. The earlier surveys had asked about the total value of holdings in these types of assets after respondents had specified the types they had. Some of the increase in the ownership of annuities may reflect this change.

17. See David Lebow, Louise Sheiner, Larry Slifman, and Martha Starr-McCluer, *Recent Trends in Compensation Practices,* Finance and Economics Discussion Series 1999-32 (Board of Governors of the Federal Reserve System, July 1999).

18. Because such options are typically not publicly traded, their value is uncertain until the exercise date; until then, meaningful valuation would require complex assumptions about future movements in stock prices.

6. Direct and indirect family holdings of stock, by selected characteristics of families, 1989, 1992, 1995, and 1998 surveys

Percent except as noted

Family characteristic	Families having stock holdings, direct or indirect[1]				Median value among families with holdings (thousands of 1998 dollars)				Stock holdings as share of group's financial assets			
	1989	1992	1995	1998	1989	1992	1995	1998	1989	1992	1995	1998
All families	**31.6**	**36.7**	**40.4**	**48.8**	**10.8**	**12.0**	**15.4**	**25.0**	**27.8**	**33.7**	**40.0**	**53.9**
Income (1998 dollars)												
Less than 10,000	*	6.8	5.4	7.7	*	6.2	3.2	4.0	*	15.9	12.9	24.8
10,000–24,999	12.7	17.8	22.2	24.7	6.4	4.6	6.4	9.0	11.7	15.3	26.7	27.5
25,000–49,999	31.5	40.2	45.4	52.7	6.0	7.2	8.5	11.5	16.9	23.7	30.3	39.1
50,000–99,999	51.5	62.5	65.4	74.3	10.2	15.4	23.6	35.7	23.2	33.5	39.9	48.8
100,000 or more	81.8	78.3	81.6	91.0	53.5	71.9	85.5	150.0	35.3	40.2	46.4	63.0
Age of head (years)												
Less than 35	22.4	28.3	36.6	40.7	3.8	4.0	5.4	7.0	20.2	24.8	27.2	44.8
35–44	38.9	42.4	46.4	56.5	6.6	8.6	10.6	20.0	29.2	31.0	39.5	54.7
45–54	41.8	46.4	48.9	58.6	16.7	17.1	27.6	38.0	33.5	40.6	42.9	55.7
55–64	36.2	45.3	40.0	55.9	23.4	28.5	32.9	47.0	27.6	37.3	44.4	58.3
65–74	26.7	30.2	34.4	42.6	25.8	18.3	36.1	56.0	26.0	31.6	35.8	51.3
75 or more	25.9	25.7	27.9	29.4	31.8	28.5	21.2	60.0	25.0	25.4	39.8	48.7

NOTE. See note to table 1.

1. Indirect holdings are those in mutual funds, retirement accounts, and other managed assets.

* Ten or fewer observations.

1995 to 89.9 percent in 1998. Declines were spread fairly evenly over most demographic groups except the income and net worth groups, in which the decreases were largest for families at the lower ends of the scales. The median holding of nonfinancial assets for all families with such assets rose 11 percent over the three-year period. Although most groups shared in the rise, the increases in the medians for the nonwhite or Hispanic group and for the self-employed were particularly noteworthy.

Vehicles

Vehicles continue to be the most widely held nonfinancial asset; 86 percent of families either owned them (table 8) or leased them (not shown) in both the 1995 and 1998 surveys.[19] Although the share of families leasing vehicles is still fairly small (6.4 percent in 1998), it has been growing quickly, while the rate of ownership slid down a bit between 1995 and 1998, to 82.8 percent.[20]

Between the 1992 and 1995 surveys, the greatest growth in leasing was among families with incomes of $100,000 or more. However, between the 1995 and 1998 surveys, the growth of leasing among families in that income group had leveled off, while it had picked up among families with incomes below $50,000.

Among owners, the median value of owned vehicles rose about $300 between 1995 and 1998, a 2.9 percent increase. Across income groups, the value of vehicles owned rose notably only for families with incomes of $100,000 or more. The median value of vehicles owned also increased substantially for families in the top 10 percent of the net worth distribution and in the 55-or-older age groups.

Primary Residence and Other Residential Real Estate

Continuing a trend since 1989, home ownership rose 1.5 percentage points from 1995, reaching 66.2 per-

7. Value of nonfinancial assets of all families, distributed by type of asset, 1989, 1992, 1995, and 1998 surveys

Percent

Type of nonfinancial asset	1989	1992	1995	1998
Vehicles	5.6	5.7	7.1	6.5
Primary residence	45.9	47.0	47.4	47.1
Other residential property	8.1	8.5	8.0	8.5
Equity in nonresidential property	11.0	10.9	7.9	7.7
Business equity	26.9	26.3	27.3	28.5
Other	2.5	1.6	2.3	1.7
Total	100	100	100	100
MEMO				
Nonfinancial assets as a share of total assets	69.6	68.5	63.4	59.4

NOTE. See note to table 1.

19. Vehicles include automobiles, vans, trucks, sport utility vehicles, motorcycles, recreational vehicles, airplanes, and boats that are owned for personal use. Counting families that have personal use of a car owned by a business raises the proportion of families with a vehicle to 87.2 percent in 1998.

20. The share of families leasing a vehicle was 2.9 percent in 1992 and 4.5 percent in 1995. Leased vehicles represented 25.0 percent of all new vehicles acquired by families in 1998, up from 20.5 percent in 1995 and 10.1 percent in 1992. For additional evidence on vehicle leasing, see Ana Aizcorbe and Martha Starr-McCluer, "Vehicle Ownership, Vehicle Acquisitions and the Growth of Auto Leasing," *Monthly Labor Review*, vol. 120 (June 1997), pp. 34–40.

8. Family holdings of nonfinancial assets, by selected characteristics of families and type of asset, and of any asset, by family characteristic, 1995 and 1998 surveys

A. 1995 Survey of Consumer Finances

Family characteristic	Vehicles	Primary residence	Other residential property	Equity in nonresidential property	Business equity	Other	Any nonfinancial asset	Any asset
	Percentage of families holding asset							
All families	**84.1**	**64.7**	**11.8**	**9.4**	**11.1**	**9.0**	**90.9**	**96.3**
Income (1998 dollars)								
Less than 10,000	54.9	36.1	3.9	4.0	4.8	3.8	66.8	83.0
10,000–24,999	82.3	54.9	7.0	5.5	6.6	5.9	89.4	96.0
25,000–49,999	91.7	67.0	9.9	8.0	9.4	9.4	96.4	99.7
50,000–99,999	93.4	84.5	16.7	14.5	16.3	11.0	98.8	100.0
100,000 or more	91.6	91.1	38.4	24.5	31.5	23.0	99.5	100.0
Age of head (years)								
Less than 35	83.8	37.9	4.2	3.6	8.3	7.2	87.1	94.3
35–44	84.7	64.7	9.7	7.1	14.3	10.0	90.6	96.0
45–54	88.2	75.3	16.3	14.3	15.5	11.4	93.6	97.3
55–64	88.4	82.0	19.9	13.4	12.7	10.2	93.9	96.4
65–74	82.5	79.5	16.1	16.2	8.7	9.0	92.6	97.7
75 or more	72.2	72.8	12.2	6.4	3.7	5.6	89.9	98.4
Race or ethnicity of respondent								
White non-Hispanic	88.2	70.6	13.2	10.4	12.8	10.6	95.1	98.6
Nonwhite or Hispanic	69.7	44.3	7.1	5.7	5.3	3.6	76.3	88.5
Current work status of head								
Working for someone else	89.9	63.8	10.3	8.0	6.9	9.6	93.9	98.6
Self-employed	86.1	74.5	21.3	22.2	58.1	15.5	96.0	97.8
Retired	76.2	70.6	13.1	8.5	3.3	5.8	88.1	95.6
Other not working	59.0	34.4	5.0	4.2	4.0	5.9	66.2	76.9
Housing status								
Owner	90.9	100.0	15.1	12.1	13.7	10.5	100.0	100.0
Renter or other	71.6	. . .	5.7	4.4	6.3	6.3	74.1	89.6
Percentiles of net worth								
Less than 25	65.4	13.7	*	.9	1.6	3.0	68.4	85.3
25–49.9	87.8	64.1	5.4	4.5	5.7	7.0	96.3	100.0
50–74.9	90.9	88.3	11.1	9.0	12.3	10.5	99.0	100.0
75–89.9	92.3	92.2	21.3	15.8	16.5	12.4	99.8	100.0
90–100	92.3	93.5	42.6	33.8	37.1	20.3	99.9	100.0
	Median value of holdings for families holding asset (thousands of 1998 dollars)							
All families	**10.5**	**95.6**	**53.1**	**31.9**	**47.8**	**9.3**	**88.1**	**108.1**
Income (1998 dollars)								
Less than 10,000	4.0	41.4	28.0	15.9	54.1	6.2	14.2	13.5
10,000–24,999	6.2	69.0	31.9	14.9	35.1	6.4	45.7	55.5
25,000–49,999	11.1	85.0	45.1	42.5	26.0	6.2	84.0	104.4
50,000–99,999	16.9	126.4	63.7	21.2	31.9	14.3	146.7	202.2
100,000 or more	24.4	196.5	106.2	106.2	265.5	19.1	314.7	608.5
Age of head (years)								
Less than 35	9.4	80.7	36.1	12.7	21.2	5.3	23.2	34.1
35–44	11.3	100.9	49.9	18.1	37.2	10.6	102.2	118.1
45–54	13.7	106.2	63.7	19.1	74.4	10.6	120.0	159.8
55–64	12.2	92.4	58.4	67.8	69.0	10.6	114.7	170.8
65–74	8.7	90.3	60.5	42.5	106.8	14.9	100.7	132.9
75 or more	5.6	85.0	28.7	6.4	37.4	8.5	83.9	102.3
Race or ethnicity of respondent								
White non-Hispanic	11.4	96.7	58.4	34.0	53.1	10.6	99.5	126.3
Nonwhite or Hispanic	7.8	74.4	30.9	21.2	27.9	6.9	37.0	40.9
Current work status of head								
Working for someone else	11.5	95.6	49.9	18.1	22.3	10.6	86.4	105.0
Self-employed	13.4	127.5	85.0	55.8	79.7	8.5	189.0	243.5
Retired	7.8	80.7	47.8	37.2	106.2	10.6	83.9	102.0
Other not working	6.6	63.7	45.1	53.1	21.2	7.4	21.2	22.3
Housing status								
Owner	12.7	95.6	55.2	37.2	58.4	10.6	123.0	168.1
Renter or other	6.7	. . .	39.8	12.7	23.4	5.3	7.9	13.1
Percentiles of net worth								
Less than 25	4.8	28.7	*	2.1	1.6	2.7	6.2	6.1
25–49.9	9.1	53.1	29.7	7.4	10.6	5.3	43.6	51.7
50–74.9	11.9	90.3	32.4	10.6	23.4	8.5	107.7	137.1
75–89.9	15.1	136.0	53.1	37.2	95.6	10.6	180.5	273.3
90–100	21.6	196.5	132.8	108.9	345.2	26.6	421.2	802.3

8.—Continued

B. 1998 Survey of Consumer Finances

Family characteristic	Vehicles	Primary residence	Other residential property	Equity in nonresidential property	Business equity	Other	Any nonfinancial asset	Any asset
	Percentage of families holding asset							
All families	**82.8**	**66.2**	**12.8**	**8.6**	**11.5**	**8.5**	**89.9**	**96.8**
Income (1998 dollars)								
Less than 10,000	51.3	34.5	*	*	3.8	2.6	62.7	83.8
10,000–24,999	78.0	51.7	5.8	5.0	5.0	5.6	85.9	96.4
25,000–49,999	89.6	68.2	11.4	7.6	10.3	9.4	95.6	99.2
50,000–99,999	93.6	85.0	19.0	12.0	15.0	10.2	98.0	100.0
100,000 or more	88.7	93.3	37.3	22.6	34.7	17.1	98.9	100.0
Age of head (years)								
Less than 35	78.3	38.9	3.5	2.7	7.2	7.3	83.3	94.8
35–44	85.8	67.1	12.2	7.5	14.7	8.8	92.0	97.6
45–54	87.5	74.4	16.2	12.2	16.2	9.2	92.9	96.7
55–64	88.7	80.3	20.4	10.4	14.3	8.5	93.8	98.2
65–74	83.4	81.5	18.4	15.3	10.1	10.3	92.0	98.5
75 or more	69.8	77.0	13.6	8.1	2.7	7.0	87.2	96.4
Race or ethnicity of respondent								
White non-Hispanic	87.3	71.8	14.1	9.4	13.2	10.0	93.8	98.8
Nonwhite or Hispanic	67.2	46.8	8.4	5.8	5.4	3.1	76.4	89.9
Current work status of head								
Working for someone else	87.6	63.5	10.6	6.7	5.5	8.8	92.4	98.2
Self-employed	89.5	81.3	25.3	17.7	63.4	13.3	98.1	99.2
Retired	73.3	72.4	14.3	10.1	3.6	6.4	85.2	94.7
Other not working	58.5	35.8	4.5	*	3.7	*	66.3	85.7
Housing status								
Owner	90.6	100.0	16.8	11.3	14.5	9.5	100.0	100.0
Renter or other	67.6	. . .	5.1	3.3	5.4	6.4	70.1	90.7
Percentiles of net worth								
Less than 25	62.3	14.1	*	*	1.4	2.5	65.2	87.4
25–49.9	87.4	67.2	5.8	3.5	6.5	8.0	96.1	100.0
50–74.9	90.4	89.3	11.8	7.9	10.6	8.9	99.1	100.0
75–89.9	90.8	94.0	26.2	16.7	17.9	11.4	99.3	100.0
90–100	92.0	95.1	41.7	30.6	41.4	18.8	99.6	100.0
	Median value of holdings for families holding asset (thousands of 1998 dollars)							
All families	**10.8**	**100.0**	**65.0**	**38.0**	**60.0**	**10.0**	**97.8**	**123.5**
Income (1998 dollars)								
Less than 10,000	4.0	51.0	*	*	37.5	5.0	16.3	11.7
10,000–24,999	5.7	71.9	70.0	25.0	31.1	5.0	43.7	46.2
25,000–49,999	10.2	85.0	50.0	28.0	37.5	6.0	83.5	112.0
50,000–99,999	16.6	130.0	60.0	30.0	56.0	12.0	156.3	233.2
100,000 or more	26.8	240.0	132.0	114.1	230.0	36.0	380.0	665.6
Age of head (years)								
Less than 35	8.9	84.0	42.5	25.0	34.0	5.0	22.7	28.9
35–44	11.4	101.0	45.0	20.0	62.5	8.0	103.5	128.0
45–54	12.8	120.0	74.0	45.0	100.0	14.0	126.8	178.9
55–64	13.5	110.0	70.0	54.0	62.5	28.0	126.9	198.2
65–74	10.8	95.0	75.0	45.0	61.1	10.0	109.9	165.2
75 or more	7.0	85.0	103.0	54.0	40.0	10.0	96.1	135.0
Race or ethnicity of respondent								
White non-Hispanic	11.8	100.0	67.0	42.5	67.6	10.0	107.6	144.9
Nonwhite or Hispanic	8.0	85.0	59.0	24.0	30.0	5.0	52.0	43.1
Current work status of head								
Working for someone else	11.2	98.0	50.0	24.0	30.0	7.0	89.6	112.4
Self-employed	15.5	150.0	85.0	80.0	100.0	50.0	256.6	329.3
Retired	8.6	89.0	100.0	50.0	50.0	10.0	97.8	134.5
Other not working	7.2	90.0	64.6	*	39.0	*	28.5	18.0
Housing status								
Owner	13.2	100.0	65.0	45.0	75.0	13.0	130.6	193.3
Renter or other	6.2	. . .	64.6	15.0	31.0	5.0	7.2	11.6
Percentiles of net worth								
Less than 25	4.9	40.0	*	*	3.5	1.0	6.4	5.9
25–49.9	8.6	60.0	37.5	10.0	12.0	5.0	51.5	60.7
50–74.9	12.6	95.0	35.0	21.0	40.0	8.8	118.0	165.4
75–89.9	15.5	140.0	80.0	45.0	87.5	15.0	218.5	362.5
90–100	23.3	250.0	151.5	120.0	300.0	55.0	519.0	973.7

NOTE. See note to table 1. * Ten or fewer observations. . . . Not applicable.

cent in 1998. Ownership grew strongly for families with incomes of $100,000 or more, for families headed by those younger than 45 or those 65 or older, for those with nonwhite or Hispanic respondents, and for families headed by the self-employed. Home ownership fell for families with less than $25,000 of income and for families headed by those aged 45 to 64.

The median value of a primary residence among homeowners rose only 4.6 percent from 1995 to 1998, but increases for some groups were very large: 23.2 percent for families with less than $10,000 of income, 22.1 percent for those with incomes of $100,000 or more, 13.0 percent for the 45-to-54 age group, and 27.2 percent among the wealthiest 10 percent of families. The median home value for families with nonwhite or Hispanic respondents increased 14.2 percent, compared with 3.4 percent for other families.[21]

In 1998, 12.8 percent of families had some form of residential real estate besides a primary residence (second homes, time shares, one- to four-family rental properties, and other types of residential property), up from 11.8 percent in 1995. The pattern of changes was mixed across demographic groups, with a notable increase for families headed by the self-employed. For families with this kind of property, the median value of their property rose 22.4 percent over the three-year period. Percentage gains were particularly large for families in the 75-or-older age group, for families with nonwhite or Hispanic respondents, and for families headed by retirees; however, because relatively few families in these groups have such property, these estimates may be imprecise.

Net Equity in Nonresidential Real Estate

Continuing a trend observed since the 1989 SCF, ownership of nonresidential real estate (commercial properties, rental properties with five or more units, farm land, undeveloped land, and all other types of nonresidential real estate except property owned through a business) slipped between 1995 and 1998. This trend partly reflects the expiration of real estate partnerships that had been established before changes in the tax code limited the deductibility of losses on investments in which a person has a ‘‘passive’’ interest. Ownership fell for most of the demographic groups; notable exceptions were families headed by those aged 75 or more and by retirees.

Among owners of nonresidential real estate, the median net equity in such property—its value less the amount of any outstanding loans secured by it—rose 19.1 percent over the 1995–98 period. The increase was shared by most of the demographic groups.

Net Equity in Privately Held Businesses

In 1998, 11.5 percent of families owned privately held business interests, a proportion that has hardly changed since 1989.[22] Between 1995 and 1998, business ownership rose 3.2 percentage points for families with $100,000 or more of income, while moving only slightly for the other income groups.

Among families with business interests, the median value of the business net of borrowing done by the business rose 25.5 percent over the three-year period. Changes were quite mixed across the demographic groups considered. The median increased for families with incomes from $25,000 to $99,999 but declined for the other income groups. By age of family head, the median fell for the 55-to-74 groups, while it rose for the others. The median holding fell for families in the top 25 percent of the net worth distribution, for whom business interests have been a key asset. The increase in business ownership for these families suggests that the decline in the median may have been driven by the startup of new businesses that have relatively low initial net values and possibly by the change in form of ownership of particularly successful businesses to that of publicly traded corporation.

Other Nonfinancial Assets

For the remaining nonfinancial assets (a broad category of tangible items including artwork, jewelry, precious metals, and antiques), ownership rates fell a bit between 1995 and 1998. The decline was spread across most of the demographic groups. In contrast, the median value of holdings for those who had such assets rose slightly. Although patterns of change in median holdings were varied across groups, the median grew strongly for the 55-or-older and self-employed groups and families in the top quarter of the net worth distribution.

21. Among homeowners, mean and median equity in a primary residence—that is, the difference between the market value of the property and the amounts outstanding on any debt secured by the property—also rose over the 1995–98 period: The median increased from $53,100 in 1995 to $57,000 in 1998, while the mean jumped from $78,300 to $87,400.

22. The forms of business in this category are sole proprietorships, limited partnerships, other types of partnerships, subchapter S corporations, other types of corporations that are not publicly traded, and other types of private businesses.

9. Family holdings of unrealized capital gains, by selected characteristics of families, 1989, 1992, 1995, and 1998 surveys
Thousands of 1998 dollars

Family characteristic	1989		1992		1995		1998	
	Median	Mean	Median	Mean	Median	Mean	Median	Mean
All families	**12.7**	**91.5**	**8.6**	**79.8**	**6.3**	**71.8**	**10.8**	**96.3**
Income (1998 dollars)								
Less than 10,000	†	11.9	†	15.3	†	16.5	†	16.0
10,000–24,999	†	30.1	.6	28.4	†	25.7	†	26.6
25,000–49,999	12.7	55.3	6.9	49.4	5.3	37.6	10.0	46.9
50,000–99,999	38.2	89.0	27.4	85.8	26.1	69.3	27.0	80.8
100,000 or more	159.0	531.5	134.7	490.7	81.3	493.8	105.3	629.2
Age of head (years)								
Less than 35	†	20.6	†	15.4	†	10.1	†	15.4
35–44	14.1	68.6	5.7	62.2	4.2	38.8	7.1	63.3
45–54	40.7	132.3	20.6	117.9	19.8	101.3	22.4	125.6
55–64	38.2	160.7	33.1	150.1	30.8	145.7	35.6	185.8
65–74	33.7	139.5	34.3	123.9	31.9	125.5	46.5	163.5
75 or more	21.5	126.2	28.9	75.8	34.7	91.3	36.0	114.7

NOTE. See note to table 1.
† Less than $50.

Unrealized Capital Gains

Changes in the values of assets such as businesses, real estate, and stocks are a key determinant of changes in family net worth. Unrealized gains are increases in the value of assets that are yet to be sold. To obtain information on this part of net worth, the survey asks about changes in value from the time of purchase for certain key assets—the primary residence, other real estate, businesses, publicly traded stock, and mutual funds.[23] Driven by the appreciation of residential real estate and especially by the strong rise in the stock market, the median unrealized capital gain rose 71.4 percent between 1995 and 1998, while the mean moved up 34.1 percent (table 9). The mean in 1998 was above its value in 1989, whereas the median was a bit below its 1989 level.

LIABILITIES

The substantial growth in family assets from 1995 to 1998 was accompanied by substantial growth in family debt. The growth in assets was somewhat faster, however, producing a slight decline in the ratio of family debts to assets (the leverage ratio), from 14.7 percent in 1995 to 14.4 percent in 1998 (table 10). But the movement in the ratio reversed only part of the upward trend observed from 1989 to 1995.

23. The survey does not collect information on capital gains for every asset. Most notably, it does not collect such information for retirement accounts.

Families' Holdings of Debt

From 1995 to 1998, the overall proportion of families with any sort of debt inched down from 74.5 percent to 74.1 percent (table 11). Nonetheless, the 1998 level remained above the 73.0 percent figure registered in 1989. Among families with debt, the median amount of debt outstanding rose 42.3 percent from 1995 to 1998, and in 1998 stood 73.3 percent above its level in 1989.

In all the surveys, the prevalence of debt rises with income through the $99,999 mark and then drops off. In contrast, the median amount of debt among those with debt rises continuously across income groups, probably because of borrowing associated with the acquisition of nonfinancial assets by higher-income groups. Across age groups, the proportion of families with debt rises relatively slowly up to about age 45 and then declines; the median shows a similar pattern. The drop-off in debt for older families is driven by the paying off of mortgages on primary residences.

10. Amount of debt of all families, distributed by type of debt, 1989, 1992, 1995, and 1998 surveys
Percent

Type of debt	1989	1992	1995	1998
Home-secured debt	69.4	72.5	73.3	71.9
Other residential property	7.6	10.0	7.5	7.4
Installment loans	16.6	11.3	11.8	12.8
Other lines of credit	1.4	.7	.6	.3
Credit card balances	2.8	3.2	3.9	3.8
Other	2.2	2.3	2.8	3.7
Total	100	100	100	100
MEMO				
Debt as a percentage of total assets	12.4	14.6	14.7	14.4

NOTE. See note to table 1.

11. Family holdings of debt, by selected characteristics of families and type of debt, 1995 and 1998 surveys

A. 1995 Survey of Consumer Finances

Family characteristic	Home-secured	Other residential property	Installment loans	Other lines of credit	Credit card balances	Other	Any debt
	Percentage of families holding debt						
All families	**41.0**	**4.7**	**45.9**	**1.9**	**47.3**	**8.5**	**74.5**
Income (1998 dollars)							
Less than 10,000	9.0	1.6	25.1	*	23.9	6.1	47.2
10,000–24,999	23.9	1.3	38.9	*	41.2	8.1	65.8
25,000–49,999	44.9	3.9	53.7	2.2	54.5	8.7	82.2
50,000–99,999	67.6	7.0	60.0	3.1	62.8	8.6	89.4
100,000 or more	72.7	19.7	39.7	4.6	41.2	13.5	85.3
Age of head (years)							
Less than 35	33.0	2.1	62.5	2.7	54.7	7.4	83.5
35–44	54.3	4.9	59.7	2.1	55.9	10.5	86.9
45–54	61.8	8.4	53.3	2.2	56.4	13.0	86.3
55–64	45.2	8.3	34.8	1.7	43.2	7.8	73.7
65–74	24.7	3.5	16.5	1.3	30.5	5.4	53.4
75 or more	6.8	1.0	8.8	*	17.5	2.9	28.4
Race or ethnicity of respondent							
White non-Hispanic	44.1	5.0	46.1	2.1	47.1	8.5	75.3
Nonwhite or Hispanic	30.2	3.5	45.3	*	48.0	8.5	71.6
Current work status of head							
Working for someone else	51.2	5.4	58.6	2.3	58.0	9.9	87.4
Self-employed	51.6	8.1	45.3	3.6	45.3	8.8	80.9
Retired	18.7	2.4	18.0	*	25.8	4.6	44.8
Other not working	18.2	*	40.8	*	36.8	9.6	63.2
Housing status							
Owner	63.3	5.8	45.4	1.5	51.1	8.0	79.6
Renter or other	. . .	2.7	46.9	2.6	40.3	9.4	65.2
Percentiles of net worth							
Less than 25	9.6	*	48.9	2.4	41.4	9.6	66.7
25–49.9	47.3	2.5	55.0	2.2	55.5	9.4	81.4
50–74.9	55.6	3.4	47.0	1.2	57.3	7.0	79.3
75–89.9	49.5	8.0	36.2	*	39.5	8.1	70.5
90–100	54.4	18.6	27.9	3.2	27.9	7.4	70.8
	Median value of holdings for families holding debt (thousands of 1998 dollars)						
All families	**54.9**	**31.9**	**6.4**	**3.7**	**1.6**	**2.1**	**23.4**
Income (1998 dollars)							
Less than 10,000	19.1	10.6	2.7	*	.6	2.1	2.2
10,000–24,999	29.7	19.1	3.8	*	1.3	1.2	8.4
25,000–49,999	45.7	29.7	6.9	3.2	1.6	1.8	21.6
50,000–99,999	69.2	33.8	9.5	2.3	2.1	3.7	64.1
100,000 or more	105.2	42.5	9.1	5.3	2.7	7.4	114.8
Age of head (years)							
Less than 35	65.9	26.6	7.5	1.5	1.4	1.6	16.1
35–44	64.8	33.8	5.9	2.1	2.0	2.1	40.0
45–54	53.1	31.9	7.6	6.4	2.1	3.2	42.4
55–64	39.3	35.1	5.3	3.6	1.4	4.2	22.4
65–74	20.2	35.1	5.2	4.0	.9	2.1	7.4
75 or more	19.3	8.5	3.6	*	.4	4.2	2.0
Race or ethnicity of respondent							
White non-Hispanic	57.4	35.1	6.9	4.0	1.6	2.7	28.6
Nonwhite or Hispanic	42.0	26.6	5.2	*	1.3	1.6	11.2
Current work status of head							
Working for someone else	59.5	30.8	7.3	2.6	1.7	2.1	30.8
Self-employed	65.9	44.6	6.4	7.4	2.7	5.3	44.1
Retired	24.4	35.1	4.3	*	.9	3.2	6.4
Other not working	47.8	*	5.2	*	.9	1.6	8.2
Housing status							
Owner	54.9	31.9	7.3	5.1	1.6	3.2	48.8
Renter or other	. . .	52.0	5.3	1.5	1.3	1.6	5.1
Percentiles of net worth							
Less than 25	49.8	*	5.6	2.8	1.7	1.6	6.6
25–49.9	47.8	20.2	6.4	3.2	1.4	1.7	22.5
50–74.9	55.8	26.6	6.2	2.4	1.6	2.1	39.1
75–89.9	53.1	27.9	7.6	*	1.5	3.2	37.9
90–100	81.8	63.2	8.3	8.5	1.5	8.5	80.0

11.—Continued

B. 1998 Survey of Consumer Finances

Family characteristic	Home-secured	Other residential property	Installment loans	Other lines of credit	Credit card balances	Other	Any debt
	Percentage of families holding debt						
All families	**43.1**	**5.1**	**43.7**	**2.3**	**44.1**	**8.8**	**74.1**
Income (1998 dollars)							
Less than 10,000	8.3	*	25.7	*	20.6	3.6	41.7
10,000–24,999	21.3	1.8	34.4	1.2	37.9	7.0	63.7
25,000–49,999	43.7	4.1	50.0	2.9	49.9	7.7	79.6
50,000–99,999	71.0	7.7	55.0	3.3	56.7	12.2	89.4
100,000 or more	73.4	16.4	43.2	2.6	40.4	14.8	87.8
Age of head (years)							
Less than 35	33.2	2.0	60.0	2.4	50.7	9.6	81.2
35–44	58.7	6.7	53.3	3.6	51.3	11.4	87.6
45–54	58.8	6.7	51.2	3.6	52.5	11.1	87.0
55–64	49.4	7.8	37.9	1.6	45.7	8.3	76.4
65–74	26.0	5.1	20.2	*	29.2	4.1	51.4
75 or more	11.5	1.8	4.2	*	11.2	2.0	24.6
Race or ethnicity of respondent							
White non-Hispanic	46.7	5.4	44.3	2.4	44.4	8.8	74.9
Nonwhite or Hispanic	30.7	4.0	41.6	1.9	43.3	8.8	71.1
Current work status of head							
Working for someone else	50.8	5.2	55.2	2.7	53.5	10.8	86.8
Self-employed	63.1	10.7	46.3	3.7	47.5	10.7	84.6
Retired	18.6	3.1	15.8	*	20.9	3.3	39.9
Other not working	26.8	*	39.0	*	39.0	7.5	65.7
Housing status							
Owner	65.1	6.2	44.3	1.8	46.2	9.3	79.4
Renter or other	. . .	2.9	42.6	3.4	40.0	7.8	63.5
Percentiles of net worth							
Less than 25	11.3	*	47.1	2.8	39.5	9.3	65.5
25–49.9	47.2	3.2	50.0	2.5	54.8	9.2	81.5
50–74.9	56.2	4.8	46.4	1.7	48.7	7.7	76.8
75–89.9	57.0	8.9	34.3	1.9	36.9	7.6	70.2
90–100	58.9	14.8	27.2	2.6	28.2	10.8	75.9
	Median value of holdings for families holding debt (thousands of 1998 dollars)						
All families	**62.0**	**40.0**	**8.7**	**2.5**	**1.7**	**3.0**	**33.3**
Income (1998 dollars)							
Less than 10,000	16.0	*	4.0	*	1.1	.6	4.1
10,000–24,999	34.2	34.0	6.0	1.1	1.0	1.3	8.0
25,000–49,999	47.0	20.0	8.0	3.0	1.9	2.2	27.1
50,000–99,999	75.0	42.0	11.3	2.8	2.4	3.8	75.0
100,000 or more	123.8	60.0	15.4	5.0	3.2	10.0	135.4
Age of head (years)							
Less than 35	71.0	55.0	9.1	1.0	1.5	1.7	19.2
35–44	70.0	40.0	7.7	1.4	2.0	3.0	55.7
45–54	68.8	40.0	10.0	3.0	1.8	5.0	48.4
55–64	49.4	41.0	8.3	4.9	2.0	5.0	34.6
65–74	29.0	56.0	6.5	*	1.1	4.5	11.9
75 or more	21.2	29.8	8.9	*	.7	1.7	8.0
Race or ethnicity of respondent							
White non-Hispanic	62.0	42.6	9.0	2.8	2.0	3.3	40.0
Nonwhite or Hispanic	62.0	30.0	7.2	0.7	1.1	1.7	15.3
Current work status of head							
Working for someone else	66.0	37.0	8.8	2.8	2.0	3.0	35.5
Self-employed	74.0	54.0	11.0	3.8	2.0	6.5	67.9
Retired	37.0	34.0	5.8	*	1.0	1.9	10.2
Other not working	57.0	*	6.7	*	1.2	1.1	12.6
Housing status							
Owner	62.0	42.6	9.5	2.2	2.0	4.0	60.9
Renter or other	. . .	27.5	7.7	2.8	1.3	1.3	6.0
Percentiles of net worth							
Less than 25	56.5	*	8.0	1.0	1.6	1.5	8.4
25–49.9	55.0	29.0	7.8	3.0	1.7	2.0	28.4
50–74.9	59.0	22.0	8.9	3.0	1.8	5.0	46.2
75–89.9	72.0	54.0	10.1	1.3	1.5	6.0	67.4
90–100	100.0	72.0	14.7	10.0	2.0	20.0	98.0

NOTE. See note to table 1. * Ten or fewer observations. . . . Not applicable.

Between 1995 and 1998, changes in the proportion of families in different demographic groups holding debt were mixed. Although the proportion declined in most groups, increases were appreciable for families with incomes of $100,000 or more, for the 55-to-64 age group, and for families headed by the self-employed. The median amount of debt increased for most of the demographic groups, and many of the changes were large.

Mortgages and Other Home Equity Borrowing on the Primary Residence

Home-secured debt (first and second mortgages and home equity loans and lines of credit secured by the primary residence) declined slightly as a share of total family debt between 1995 and 1998 (table 10). Nonetheless, the proportion of families with such debt rose over the period, from 41.0 percent to 43.1 percent (table 11), a level substantially above the 40.0 percent registered in 1989.[24] The proportion of families holding such debt rose for most groups in the 1995–98 period. Increases were particularly notable for families headed by the self-employed and for families in the top quarter of the net worth distribution.

While home purchase continues to be the main purpose of home-secured debt, the use of such borrowing for other purposes has become increasingly important since the Tax Reform Act of 1986, which phased out the deductibility of interest payments on most debt other than that secured by the primary residence. Moreover, declining interest rates during most of 1998 strengthened families' incentives that year to refinance existing mortgages and, by refinancing for more than the existing balance, use the opportunity to obtain funds for other purposes.

For families with home-secured debt, the median amount of home-secured debt moved up 12.9 percent over the recent three-year period, while the median value of primary residences rose 5.4 percent for this group. Taken together with the fact that the share of families with home-secured debt rose by more than the share who were homeowners, this result suggests that many families may have been using such borrowing to extract equity from their homes. The median amount of home-secured debt rose for almost every group, with the increases especially marked among the top income and net worth groups. The proportion of families in the nonwhite or Hispanic group borrowing against a primary residence remained 16 percentage points below that of other families; however, the median level of borrowing by the nonwhite or Hispanic group jumped to the level of the other families in 1998.

For home equity lines of credit, the amount included in home-secured debt is only the balance outstanding at the time of the interview. The use of home equity credit lines has expanded since 1995, when 5.1 percent of families had a line and 56.0 percent of those families were drawing funds on it; in 1998 the figures were 7.0 percent with lines and 63.7 percent drawing on them (not shown in table).

24. In 1998, 65.1 percent of homeowners had some type of home-secured debt.

Borrowing on Other Residential Real Estate

Across income and net worth groups, borrowing for other residential real estate is most prevalent in all the surveys among families at the upper ends of the distributions. While the overall proportion of families having this type of debt rose slightly from 1995 to 1998, the shares of families in the top income and net worth groups having such debt fell distinctly. At the same time, for those having this type of debt, the median amount owed rose in almost every demographic group.

Installment Borrowing

Although the share of installment borrowing in total family debt rose 1.0 percentage point between 1995 and 1998, its prevalence dropped 2.2 percentage points, to 43.7 percent; the prevalence of such borrowing stood at 49.4 percent in 1989.[25] Over the recent three-year period, the prevalence declined for all income groups except the top and bottom and for all age groups except those between 55 and 74. At least some of the decline is attributable to the substitution of other types of borrowing and to the growth of vehicle leasing.

Over the same period, for those with installment loans the median amount owed on such loans climbed 36.0 percent, to $8,700. The median rose for most demographic groups, with pronounced increases for families with incomes of $100,000 or more, for families headed by those aged 75 or older and retirees, and for the wealthiest 10 percent of families.

25. The term "installment borrowing" in this article describes consumer loans that typically have fixed payments and a fixed term. Examples are automobile loans, student loans, and loans for furniture, appliances, and other durable consumer goods.

Borrowing on Other Lines of Credit

The use of personal lines of credit other than home equity lines rebounded slightly from 1995 to 1998. Still, only 2.3 percent of families used such debt in 1998, and usage was similarly thin across demographic groups.[26] At the same time, among those borrowers the median amount borrowed declined 32.4 percent, with mixed changes across family groups.

Credit Card Borrowing

The proportion of families that had an outstanding balance on any of their credit cards after paying their most recent bills dropped 3.2 percentage points from 1995 to 1998, to 44.1 percent.[27] The decline was shared by all of the demographic groups except for families headed by those aged 55 to 64, by the self-employed, and by those neither working nor retired and families in the highest net worth group.

Among families having balances outstanding on any of their credit cards, the median total balances owed by the family hardly changed over the period, standing at $1,700 in 1998. Nonetheless, increases were much more common than declines across the demographic groups.

Bank-type cards are the most widely held and most widely accepted credit cards. In 1998, 67.6 percent of families had a bank-type card—up from 66.5 percent in 1995 (not shown in table). Of families with such cards, the share carrying a balance edged down a bit, from 56.0 percent in 1995 to 54.8 percent in 1998; this result suggests some increase in the relative importance of convenience use of bank-type cards over the period (that is, use in which the balance is paid in full each month).

Among families with bank-type cards, the median total credit limit on all their bank-type cards rose from $8,700 in 1995 to $10,000 in 1998. Among families with balances on their cards, the median limits were somewhat lower, at $8,000 in 1995 and $9,500 in 1998; the median fraction of the available credit limit used by this group was about 28 percent in 1998, up slightly from 24 percent in 1995. The survey asks for the interest rate paid on the card on which the family has the largest balance, or on the newest card for families without balances. In both 1995 and 1998, the median interest rate reported was 15 percent; the result is nearly the same if attention is restricted only to families borrowing on their cards.

Other Debt

Other borrowing (loans on insurance policies, loans against pension accounts, borrowing on a margin account, and unclassified loans) was slightly more prevalent in 1998 than in 1995. Increases and decreases were scattered across the demographic groups. At the same time, for borrowers, the median amount of other debt owed rose from $2,100 to $3,000. On a percentage basis, most of the changes across the demographic groups were sizable. The increase in the amount of borrowing was driven by somewhat greater borrowing against pension accounts and cash value life insurance; while the share of families reporting balances outstanding on margin loans ticked up from 0.2 percent in 1995 to 0.8 percent in 1998, the median amount of such loans actually slipped a bit over the period.

Reasons for Borrowing

The SCF provides detailed information on the reasons that families borrow money (table 12).[28] One subtle problem with the use of these data is that, even though money is borrowed for a particular purpose, it may be used to offset some other use of funds. For example, a family may have sufficient assets to purchase a home without using a mortgage but may instead choose to finance the purchase to free existing funds for another purpose. Thus, trends in the data can be only suggestive of the underlying use of funds by families.

The survey shows that the proportion of total borrowing directly attributable to home purchase fell 2.3 percentage points between 1995 and 1998, although the 68.1 percent level seen in 1998 was still above that observed in 1989 or 1992. Almost offset-

26. In 1998, another 0.9 percent of all families had such credit lines available but had no outstanding balance at the time of the interview.

27. The debt could have been on bank-type cards (such as Visa, Mastercard, Discover, and Optima), store and gasoline company cards, so-called travel and entertainment cards (such as American Express and Diners Club), and other credit cards.

28. The survey does not collect exhaustive detail on the uses of borrowed funds. In the case of credit cards, it was deemed impractical to ask about the purposes of borrowing. For the analysis here, credit card debt is included in the category "goods and services." In the case of first mortgages taken out when a property was obtained, it was assumed that the funds were used for the purchase of the home. The surveys before 1995 did not collect information on the use of funds from refinancing a first mortgage; in the table, such borrowing is attributed to home purchase in all the years shown. The surveys before 1998 did not collect information on the uses of funds borrowed from pension accounts; the table reports borrowing from pension accounts as a separate category, unclassified as to purpose.

12. Amount of debt of all families, distributed by purpose of debt, 1989, 1992, 1995, and 1998 surveys

Percent

Purpose of debt	1989	1992	1995	1998
Home purchase	63.5	67.4	70.4	68.1
Home improvement	2.5	2.5	2.0	2.0
Other residential property	9.8	10.8	8.2	7.8
Investments, excluding real estate	3.8	1.8	1.0	3.2
Vehicles	10.4	7.0	7.5	7.5
Goods and services	5.9	5.6	5.7	6.0
Education	2.3	2.8	2.7	3.4
Unclassifiable loans against pension accounts	.2	.1	.2	.4
Other	1.5	2.1	2.2	1.5
Total	100	100	100	100

NOTE. See note to table 1.

13. Amount of debt of all families, distributed by type of lending institution, 1989, 1992, 1995, and 1998 surveys

Percent

Type of institution	1989	1992	1995	1998
Commercial bank	28.2	33.3	35.1	32.6
Savings and loan or savings bank	26.1	16.8	10.8	9.6
Credit union	4.0	4.0	4.5	4.2
Finance or loan company	3.7	3.2	3.2	4.2
Brokerage	2.2	3.1	1.9	3.7
Mortgage or real estate lender	21.2	27.1	32.7	35.9
Individual lender	6.8	4.3	5.0	3.4
Other nonfinancial	1.6	1.6	.8	1.3
Government	2.0	2.0	1.3	.6
Credit card and store card	2.8	3.3	3.9	3.8
Pension account	.2	.1	.2	.4
Other	1.1	1.1	.7	.3
Total	100	100	100	100

NOTE. See note to table 1.

ting this decline was an increase in borrowing for investment purposes; in light of the rising stock market and strong business conditions, some of this borrowing may include borrowing to invest in equities or to start a new business. The shares of borrowing for education, borrowing for purchases of goods and services, and borrowing from pension accounts all rose. Borrowing for other residential real estate and for miscellaneous purposes both declined.

First mortgages on primary residences may be used to purchase a home or to extract equity for other purposes. Borrowing for the initial home purchase accounts for the great majority of debt owed on first mortgages. However, in 1998 approximately 41 percent of all families with first mortgages had refinanced their home at some time, and 26.1 percent of them had extracted some of their home equity (not shown in table). Among families that removed some equity when they refinanced, the major uses reported for the funds were home improvements or repairs (43.1 percent), payment of bills or bill consolidation (20.8 percent), investments (7.8 percent), education (6.4 percent), and vehicle purchases (4.5 percent).

Choice of Lenders

Reflecting ongoing changes in markets for financial services, the mix of institutions that families used for borrowing shifted markedly (table 13). Continuing a secular decline, the share of family borrowing attrib-

14. Ratio of debt payments to family income, share of debtors with ratio above 40 percent, and share of debtors with any payment sixty days or more past due, by selected family characteristics, 1989, 1992, 1995, and 1998 surveys

Percent

Family characteristic	Aggregate				Median			
	1989	1992	1995	1998	1989	1992	1995	1998
All families	**12.7**	**14.1**	**13.6**	**14.5**	**15.9**	**16.1**	**16.1**	**17.6**
Income (1998 dollars)								
Less than 10,000	16.2	16.8	19.5	19.4	23.0	19.5	15.4	20.3
10,000–24,999	12.5	14.8	16.1	16.2	16.4	15.3	17.7	17.8
25,000–49,999	16.0	16.5	16.2	17.4	16.1	16.3	16.6	18.1
50,000–99,999	16.5	15.3	16.0	17.4	16.2	17.0	16.9	18.3
100,000 or more	8.0	10.7	8.7	10.0	11.8	13.7	11.1	13.1
Age of head (years)								
Less than 35	18.0	16.5	17.1	16.6	17.3	16.6	16.9	17.4
35–44	16.7	17.8	16.6	17.0	17.9	19.0	18.1	19.4
45–54	12.2	14.6	14.6	16.3	16.2	16.1	16.6	17.8
55–64	9.0	11.4	11.5	12.9	12.6	14.5	14.0	16.7
65–74	5.5	7.8	6.9	8.5	11.1	10.6	12.2	13.9
75 and more	2.1	3.4	2.9	3.9	9.8	5.0	3.4	8.9
Percentiles of net worth								
Less than 25	11.5	10.9	12.5	14.0	11.2	10.6	12.1	14.5
25–49.9	16.0	17.1	17.9	19.0	16.9	19.0	18.6	19.0
50–74.9	17.8	17.8	17.3	17.7	18.5	18.3	18.3	19.7
75–89.9	14.6	14.3	13.5	14.4	15.2	16.0	15.3	17.6
90–100	7.3	10.5	9.1	10.3	12.2	14.0	13.3	14.5

utable to savings and loan institutions and savings banks moved down 1.2 percentage points from 1995 to 1998. After rising in earlier surveys, the share of lending attributable to commercial banks also declined, by 2.5 percentage points over the period. The share of families' debts held by mortgage and real estate lenders rose 3.2 percentage points, the share held by finance companies ticked up by 1 percentage point, and the share held by brokerages moved up 1.8 percentage points.[29] The shares of other nonfinancial lenders and of pension accounts also rose. At the same time, the importance of lending by credit unions, individuals, government, credit card lenders, and other lenders all declined.

Debt Burden

The rise in family indebtedness over the past decade has raised a concern that the debt might become excessively burdensome to families. The ability of families to service their loans is a function of two factors: the terms of the loan payments and the income and assets that families have available to meet those payments. In planning their borrowing, families make assumptions about their future ability to repay the loans. If events are sufficiently contrary to their assumptions, the resulting defaults might induce restraint in spending and a broader pattern of financial distress in the economy.

Interest rates on many types of loans fell somewhat toward the end of the 1995–98 period. Over the three-year period, family income rose broadly, the proportion of families with any type of debt fell slightly, but the median amount owed increased substantially.[30] The net effect of all these movements on the ability of families to service their loans is not immediately obvious.

The ratio of total family debt payments to total family income is a common measure of "debt burden." Most often, this ratio is computed from aggregate data as the ratio of the total debt payments of all families to the total income of all families. Estimates of this ratio constructed from the SCF data rose from 13.6 percent in 1995 to 14.5 percent in 1998 (table 14). This figure surpasses the 14.1 percent level recorded in the 1992 SCF, the previous high point since 1989.

The SCF data can also be used to compute the ratio by demographic group. With the exception of families in the less-than-35 age group, the ratio of payments to income held steady or rose between 1995 and 1998 for every group in the table.[31] The relative size of the increase was particularly notable for families with incomes of $100,000 or more and those in the 65-or-older age groups.

29. In this analysis, the mortgages reported to be held by finance companies are classified with mortgage and real estate lenders.

30. As noted above, the SCF measures before-tax cash family income for the calendar year preceding the survey.

31. If the calculation of the ratio is limited to families that actually had debt, the results show very similar patterns of change between 1995 and 1998.

14.—Continued

Percent

Family characteristic	Ratio above 40 percent				Any payment sixty days or more past due			
	1989	1992	1995	1998	1989	1992	1995	1998
All families	**10.1**	**10.9**	**10.5**	**12.7**	**7.3**	**6.0**	**7.1**	**8.1**
Income (1998 dollars)								
Less than 10,000	28.6	28.4	27.6	32.0	20.9	11.6	8.4	15.1
10,000–24,999	15.0	15.5	17.3	19.9	12.2	9.3	11.3	12.3
25,000–49,999	9.1	9.6	8.0	13.8	4.8	6.3	8.6	9.2
50,000–99,999	4.9	4.4	4.2	5.7	4.5	2.2	2.7	4.5
100,000 or more	1.8	2.2	1.7	2.1	1.2	.5	1.3	1.5
Age of head (years)								
Less than 35	12.7	10.5	11.0	11.8	11.2	8.3	8.7	11.1
35–44	7.8	11.6	9.2	11.6	6.4	6.8	7.7	8.4
45–54	10.9	10.2	10.4	11.6	4.5	5.4	7.4	7.4
55–64	8.6	14.3	14.5	13.9	7.4	4.7	3.2	7.5
65–74	7.7	7.8	7.8	17.5	3.3	1.0	5.3	3.1
75 and more	14.1	8.7	8.9	20.9	1.2	1.8	5.4	1.1
Percentiles of net worth								
Less than 25	7.7	9.6	9.7	11.9	17.7	14.4	14.5	16.2
25–49.9	11.9	11.9	11.1	14.8	7.6	5.5	8.2	9.8
50–74.9	11.1	11.8	10.8	12.5	3.8	3.1	4.4	5.5
75–89.9	10.1	10.1	8.7	11.5	2.2	2.3	2.4	1.0
90–100	7.8	10.0	12.4	11.5	1.6	1.8	.7	2.4

Note. See note to table 1.

While the aggregate ratios indicate the trends in debt burdens for families and groups overall, the SCF data also make it possible to look at the ratio of total loan payments to income for typical borrowers. Among families with debt, the median ratio of payments to income stood at 15.9 percent in 1989; in 1992 and 1995 it was only marginally higher, but in 1998 it jumped to 17.6 percent. The median ratio also rose for almost every demographic group. The most striking increases were among families with incomes of less than $10,000 and those in the 75-or-older group.

Although both the aggregate and median measures of debt burden increased over the 1995–98 period, the levels of these ratios were still well below those often considered to be indicative of financial distress for individual borrowers. However, these measures may not fully reflect problems among families with high levels of debt. One indicator of the prevalence of financial distress is the proportion of families whose debt payments represent more than 40 percent of their income. The fraction of such families, which was 10.1 percent in 1989, rose appreciably between 1995 and 1998, from 10.5 percent to 12.7 percent. The measure rose for most demographic groups, with particularly large increases among families with incomes below $50,000 and those in the 65-or-older age groups.

If a family has any sort of debt at the time of the survey, the SCF asks whether any payments have been late by sixty days or more at least once in the preceding year.[32] The data show that the fraction of families with debt who had been late rose from 7.1 percent in 1995 to 8.1 percent in 1998—a high since 1989. Over the three-year period, the proportion rose notably in the under-$10,000 income group and the 55–64 age group and decreased in the oldest two age groups.

Summary

Between 1995 and 1998, the mean and median net worth of U.S. families rose considerably. These measures of net worth rose for most of the demographic groups considered in the article, but they declined for a few groups. Underlying the rise in net worth was wider ownership of many types of assets combined with higher valuations in key asset markets and a lesser rise in levels of indebtedness.

Ownership of primary residences and retirement accounts increased notably between 1995 and 1998. In addition, the proportion of families owning publicly traded stocks (either directly or through mutual funds, retirement accounts, or other managed assets) jumped more than 8 percentage points, with substantial gains across income and age groups. For some demographic groups, increased ownership of assets corresponded to declines in median holdings, most likely because the "new" holders of these assets had relatively small amounts.

The proportion of families with debt declined slightly over the period, but the median amount owed jumped more than 42 percent. The median amount of mortgage debt grew strongly, although the overall fraction of debt accounted for by mortgages declined. On net, the ratio of debts to assets for all families declined a bit. However, some indicators of debt burden, such as the median ratio of debt payments to income among debtors, showed substantial increases.

Increases in overall mean and median income were less dramatic than those for net worth, but for the first time since their low points observed in the 1992 SCF, the mean and median pushed above their 1989 levels. At least some part of the recent increases must be attributable to capital gains from the sale of assets. However, the 2.5 percentage point drop in the fraction of families with incomes below $10,000 suggests that improved employment and earnings for some families were also key factors.

Appendix: Survey Procedures and Statistical Measures

The 1998 data used here represent the best estimates at the current advanced stage of data processing, but they may differ in some ways from the final version. Data from the 1998 SCF, suitably altered to protect the privacy of respondents, will be available in February 2000 at www.federalreserve.gov/pubs/oss/oss2/98/scf98home.html.

The data used in this article from the 1989, 1992, and 1995 SCFs are derived from the final versions of those surveys. Results reported in this article may differ in some details from results reported earlier either because of additional data processing, revisions to the survey weights, or adjustments for inflation. Further discussion of the methodology

32. The measure of late payments in the SCF differs conceptually from the aggregate delinquency rate in some important respects. Whereas the delinquency rate records late payments on each loan in a given period, the survey asks families whether they have been late or behind in any of their payments during the past year. Thus, for example, a family with three delinquent loans would be counted three times in the aggregate data but only once in the SCF.

underlying the SCF is available at the above web address.

Generally, the survey estimates correspond fairly well to external estimates. Comparisons of SCF estimates with aggregate data from the Federal Reserve flow of funds accounts suggest that when adjustments are made to achieve conceptual comparability, these aggregate estimates and the SCF estimates are usually very close.[33] In general, only medians from the SCF can be compared with those of other surveys because of the special design of the SCF sample.

Definition of Family in the SCF

The definition of ''family'' used throughout this article differs from that typically used in other government studies. In the SCF, a household unit is divided into a ''primary economic unit'' (PEU)—the family—and everyone else in the household. The PEU is intended to be the economically dominant single individual or couple (whether married or living together as partners) and all other persons living in the household who are financially dependent on that person or those persons. In other government studies—for example, those of the Bureau of the Census—an individual is not considered a family. In this report, the head of the family is taken to be the central individual in a PEU without a core couple, the male in a mixed-sex core couple of the PEU, or the older person in a same-sex core couple. The term ''head'' used in this article is an artifact of the organization of the data and implies no judgment about the actual structure of families.

The Sampling Techniques

The survey is expected to provide a core set of data on family assets and liabilities. The major aspects of the sample design that address this requirement have been fixed since 1989. The SCF combines two techniques for random sampling.[34] First, a standard, multistage area-probability sample (a geographically based random sample) is selected to provide good coverage of characteristics, such as home ownership, that are broadly distributed in the population.

Second, a supplemental sample is selected to disproportionately include wealthy families, who hold a disproportionately large share of such thinly held assets as noncorporate businesses and tax-exempt bonds. This sample is drawn from a list of statistical records derived from tax data. These records are made available for this purpose under strict rules governing confidentiality, the rights of potential respondents to refuse participation in the survey, and the types of information that can be made available.

Of the 4,299 completed interviews in the 1995 survey, 2,780 families came from the area-probability sample, and 1,519 were from the list sample; the comparable figures for the 4,309 cases completed in 1998 are 2,813 families from the area-probability sample and 1,496 from the list sample.[35]

The Interviews

Since 1989, only minor changes to the SCF questionnaires have been made, and then only in response to financial innovations or to gather additional information on the structure of family finances. Thus, the information obtained by the survey is highly comparable over this period.

The generosity of families in giving their time for interviews has been crucial to the success of the SCF. In the 1998 SCF, the median interview required about 1¼ hours. However, for some particularly complicated cases, the amount of time needed was substantially more than 2 hours. The role of interviewers in this effort is also critical: Without their dedication and perseverance, the survey would not have been possible.

Data for the 1995 and 1998 surveys were collected by the National Opinion Research Center at the University of Chicago (NORC) between the months of June and December in each of the two years. The great majority of interviews were obtained in-person, although interviewers were allowed to conduct telephone interviews if that was more convenient for the respondent. In both years, interviewers used a program running on laptop computers to administer the survey and collect the data.

The use of computer-assisted personal interviewing (CAPI) has the great advantage of enforcing systematic collection of data across all cases. In the implementation of CAPI for the SCF, the program was tailored to allow the collection of partial informa-

33. For the details of this comparison, see Rochelle L. Antoniewicz, *A Comparison of the Household Sector from the Flow of Funds Accounts and the Survey of Consumer Finances*, Finance and Economics Discussion Series 1996-26 (Board of Governors of the Federal Reserve System, June 1996).

34. For additional technical details, see Kennickell and Woodburn, ''Consistent Weight Design.''

35. The 1995 SCF represents 99.0 million families, and the 1998 SCF represents 102.6 million families.

tion in the form of ranges whenever a respondent either did not know or did not want to reveal an exact dollar figure.[36]

Response rates differ strongly in the two parts of the SCF sample. In both 1995 and 1998 about 70 percent of households selected into the area-probability sample actually completed interviews. The overall response rate in the list sample was about 35 percent; in the part of the list-sample likely containing the wealthiest families, the response rate was only about 10 percent. Analysis of the data confirms that the tendency to refuse participation is highly correlated with net worth.

Sources of Error

Errors may be introduced into survey results at many stages. Sampling error, the variability expected to occur in estimates based on a sample instead of a census, is a particularly important source of error. Such error may be reduced either by increasing the size of a sample or, as is done in the SCF, by designing the sample to reduce important sources of variability. Sampling error can be estimated, and for this article we use replication methods to do so.

Replication methods draw samples from the set of actual respondents in a way that incorporates the important dimensions of the original sample design. In the SCF, weights were computed for all the cases in each of the selected replicates. For each statistic for which standard errors are reported in this article, the weighted statistic is estimated using the replicate samples, and a measure of the variability of these estimates is combined with a measure of the variability due to imputation (see below) to yield the standard error.[37]

In addition to errors of sampling, interviewers may introduce errors by failing to follow the survey protocol or misunderstanding a respondent's answers. SCF interviewers are given lengthy, project-specific training to minimize such problems. Respondents may introduce error by interpreting a question in a sense different from that intended by the survey. For the SCF, extensive pre-testing of questions and thorough review of the data tends to reduce this source of error.

Nonresponse—either complete nonresponse to the survey or nonresponse to selected items within a survey—may be another important source of error. As noted in more detail below, the SCF uses weighting to adjust for differential nonresponse to the survey. To deal with missing information on individual questions within the interview, the SCF uses statistical methods to impute missing data.[38]

Weighting

To provide a measure of the frequency with which families similar to the sample families could be expected to be found in the population of all families, analysis weights are computed for each case to account for both the systematic properties of the design and for differential patterns of nonresponse. The SCF response rates are low by the standards of other major government surveys. However, unlike other surveys, which almost certainly also have differential nonresponse by wealthy households, the SCF has the means to adjust for such nonresponse. A major part of SCF research is devoted to the evaluation of nonresponse and adjustments for nonresponse in the analysis weights for the survey.[39]

Preparations for the description of the 1998 SCF data included a detailed analysis of the assets and liabilities of families classified by a large number of characteristics. At this stage, it became clear that the 1998 SCF estimates of home ownership rates for nonwhites and Hispanics were substantially understating the levels observed in other surveys, particularly the Current Population Survey (CPS). The CPS was already used in weighting adjustments to benchmark the overall home ownership rate in the SCF. An examination of data from the earlier SCFs indicated problems in other years as well, but the directions of the differences were not consistent.

Because of the importance of SCF data in assessing the financial behavior and well-being of nonwhites and Hispanics, and because of the importance of home ownership as an indicator of key financial relationships, it was decided to add a new adjustment to the SCF weighting design to bring the survey's estimates of home ownership for nonwhites and His-

36. For a review of the SCF experience in the collection of range data, see Arthur B. Kennickell, "Using Range Techniques with CAPI in the 1995 Survey of Consumer Finances" (Board of Governors of the Federal Reserve System, January 1997). Available at www.federalreserve.gov/pubs/oss/oss2/method.html.

37. See Kennickell and Woodburn, "Consistent Weight Design."

38. For a description of the imputation procedures used in the SCF, see Arthur B. Kennickell, "Multiple Imputation in the Survey of Consumer Finances," in *Proceedings of the Section on Business and Economic Statistics* (1998 Annual Meetings of the American Statistical Association, Dallas, August), pp. 11–20.

39. For a description of the weighting methodology, see Kennickell and Woodburn, "Consistent Weight Design."

panics more in line with the CPS estimates.[40] Such adjusted weights were computed for the 1989, 1992, 1995, and 1998 surveys, and these weights were used in all calculations reported in this article. These weights are available in the public version of the SCF data sets as X42001.

40. Details of the adjustments are given in Arthur B. Kennickell, ‘‘Revisions to the SCF Weighting Methodology: Accounting for Race/Ethnicity and Homeownership’’ (Board of Governors of the Federal Reserve System, December 1999). Available at www.federalreserve.gov/pubs/oss/oss2/method.html.

For this article, the weights of a small number of cases have been further adjusted to diminish the possibility that the results reported could be unduly affected by influential observations. Such influential observations were detected using a graphical technique to inspect the weighted distribution of the underlying data. Most of the cases found were holders of an unusual asset or liability or members of demographic groups in which such holdings were rare. These weight adjustments are likely to make the key findings in the article more robust. □