Changes in Family Finances from 1989 to 1992: Evidence from the Survey of Consumer Finances

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Using newly available data from the 1992 Survey of Consumer Finances along with previously available data from the 1989 survey, this article provides detailed evidence of the way family income and net worth changed over the three-year period. Although the processing of the 1992 data is not yet complete, the preliminary findings indicate some noteworthy changes in the income and net worth of families.

First, in a development that paralleled declines in interest rates over the period, families tended to shift their asset portfolios away from traditional deposits and toward mutual funds. Second, an important increase occurred in ownership of tax-deferred retirement accounts as well as in the median size of such accounts. Third, despite a decline in real family income over the period, the median ratio of debt payments to family income remained steady, largely because declining interest rates tended to lower payments. Finally, income and net worth for nonwhite and Hispanic families grew substantially relative to the comparatively low levels at which they started the period.

To a large extent, the findings from the survey reflect recent macroeconomic events and other, longer-term trends. In terms of macroeconomic changes, the period from 1989 to 1992 spanned a recession and an evolving expansion. In 1989, the U.S. economy was at the end of a long expansion, with a civilian unemployment rate of 5.4 percent; by 1992, the economy had started its recovery from the 1990–91 recession, but the unemployment rate stood at 7.5 percent.[1] Partially reflecting the effects of recession, the proportion of families headed by persons in blue-collar jobs declined as the proportion headed by persons who were not working rose. Concurrently, interest rates on three-month certificates of deposit fell from 7.7 percent to 3.1 percent while rates on long-term, fixed-rate mortgages declined less sharply, from 9.8 percent to 8.0 percent. At the same time, the Standard and Poor's 500 index of stock prices rose at an annualized rate of 7.1 percent, and real home prices leveled off or, in some areas, even declined. On average, consumer prices rose 4.2 percent per year over this period.

Several longer-term trends also affected family finances. The number and types of mutual funds available to consumers continued to grow as the cost of information processing declined. Continued easing of restrictions on interstate banking, the decline of the savings and loan industry, and the increase in the local presence of national mortgage lenders changed the types of institutions that families faced when obtaining loans. As the tax advantages of individual retirement accounts weakened, employers—responding to a variety of changes in legislation governing pensions—increasingly offered tax-deferred savings plans as a way for workers to accumulate savings for retirement.

A long-running demographic trend is the aging of the large post–World War II cohort. In the three-year period covered by this article, the proportion of families headed by persons between 45 and 54 years of age, a group largely composed of this ''baby boom'' generation, rose from 14.4 percent to 16.2 percent. A smaller increase also occurred in the fraction of families headed by persons aged 65 and more.

The Survey of Consumer Finances

The Survey of Consumer Finances (SCF) is intended to provide detailed information on the

1. The quarters selected for the aggregate figures were the fourth quarter of 1989 and the third quarter of 1992 because these quarters contained the midpoints of the survey field periods.

assets, liabilities, and demographic characteristics of U.S. families.[2] In its current form, the SCF has been conducted every three years since 1983. The information reported in this article derives from the 1989 and 1992 survey data. Analyses and descriptions of the earlier surveys have been published in previous issues of the *Federal Reserve Bulletin.*[3]

The sample design for the SCF is complex. Some assets, such as business assets and corporate stocks, are held in large part by a disproportionately small number of families. To provide a sufficient number of cases for the analysis of such variables, the survey oversamples wealthy families and uses weights to maintain the correct proportion of such families in the overall population. Because of the complexity of the sample, computing standard errors for the figures reported here is not possible at the current stage of data processing. However, the data have been carefully inspected for outliers and overly influential cases. Based on this information and on sampling error calculations from earlier surveys, the presentation in this article concentrates on results that are likely to be sustained by more formal significance tests. (See the appendix for a technical description of the survey.)

The Survey Research Center at the University of Michigan collected the data for the 1989 SCF, which was sponsored by the Federal Reserve in cooperation with the Department of the Treasury, the Department of Health and Human Services, the National Institute on Aging, the Small Business Administration, the General Accounting Office, the Comptroller of the Currency, and the Congressional Joint Committee on Taxation. The National Opinion Research Center at the University of Chicago collected the data for the 1992 survey, which was sponsored by the Federal Reserve in cooperation with the Department of the Treasury.

2. The term ‘‘family’’ as it is used in this article is close to the U.S. Bureau of the Census definition of ‘‘household.’’ Both definitions include both married couples and single individuals. The appendix to this article discusses the technical definition of family used here.

3. For a discussion of the results from the last SCF, see Arthur Kennickell and Janice Shack-Marquez, ‘‘Changes in Family Finances from 1983 to 1989: Evidence from the Survey of Consumer Finances,’’ *Federal Reserve Bulletin,* vol. 78 (January 1992), pp. 1–18.

FAMILY INCOME

From an examination of patterns across demographic groups, two trends are apparent. Both the 1989 and the 1992 data show a tendency for income to rise with education (table 1). The surveys also show that family income initially rises with age and then declines after middle age.

Respondents reported their before-tax family income for the year preceding the survey. In real terms, the mean of this measure of family income declined about $1,300 between 1989 and 1992, while the median fell about $1,500.[4] Data from the Current Population Survey of the Bureau of the Census also show a decline in real median income over this period. Much of this change is likely due to cyclical factors. However, the trend growth rate in real median income was also low: an average of less than 1 percent per year over the ten years before 1992.

Changes in Income by Demographic Categories

When disaggregated by various demographic categories, the income data reveal large changes for some groups. Median income fell sharply for the group with heads between the ages of 35 and 44 and those 75 and older, but rose for all other age groups. The decline for the 35-to-44 group appears to reflect a disproportionate rise in unemployment among such families. The fall in median income for the 75-and-over group is likely a result of declining interest income from investments. The classification by the family head’s level of formal education shows either a decline or no change in mean income for all groups and a rise in median income only for those with a college degree. Nonwhites and Hispanics experienced growth in both mean and median income, reflecting an increase in both the proportion of these families with an employed head

4. All dollar figures have been adjusted to 1992 dollars using the consumer price index (CPI) for all urban consumers.

and the proportion with heads in professional and managerial occupations.[5]

By work status, median income rose substantially for families headed by persons who were employed in a service occupation or self-employed. Median income fell for families headed by skilled blue-collar workers, a development due largely to the recession, and for families headed by retired persons. As mentioned earlier, the income data refer to the year prior to the survey date. This convention helps explain the otherwise puzzling rise in the mean and median of prior-year income for other families with heads who were not working, because this group includes some highly paid workers who lost their jobs because of the recession or restructuring.

5. As described in the appendix, the race–ethnicity variable used here differs from that used in Kennickell and Shack-Marquez, "Changes in Family Finances from 1983 to 1989."

Family Saving

An important determinant of changes in family wealth is saving out of current income. If families'

1. Before-tax family income for previous year, by selected characteristics of families, 1989 and 1992, and percentage of families who saved in 1992

Thousands of 1992 dollars except as noted

Family characteristic	1989			1992			
	Mean	Median	Percentage of families	Mean	Median	Percentage of families who saved	Percentage of families
All families	**46.2**	**29.4**	**100**	**44.9**	**27.9**	**57.3**	**100**
Age of head (years)							
Less than 35	32.8	24.0	27.2	33.8	25.3	59.5	25.9
35–44	57.3	42.9	23.4	52.3	36.3	56.9	22.7
45–54	71.7	42.4	14.4	62.1	43.1	58.7	16.2
55–64	48.8	29.8	13.9	55.2	32.1	60.3	13.1
65–74	35.7	17.9	12.0	34.6	18.3	55.4	12.7
75 and more	26.4	15.5	9.0	27.3	13.5	47.8	9.4
Education of head							
0–8 grade	19.7	13.1	12.9	17.1	10.9	33.5	9.4
9–12 grade	24.6	17.9	11.4	20.9	15.4	43.7	10.7
High school diploma	33.6	25.3	32.1	32.9	24.8	56.7	29.6
Some college	46.6	33.4	15.1	39.6	28.8	59.5	17.7
College degree	80.6	47.7	28.5	74.4	48.3	67.9	32.6
Race or ethnicity of head							
White non-Hispanic	52.7	34.6	75.1	49.3	31.1	61.1	77.9
Nonwhite or Hispanic	26.4	16.7	24.9	29.3	18.6	44.0	22.1
Current work status of head							
Professional, managerial	71.0	51.5	16.9	71.3	51.5	70.0	17.2
Technical, sales, clerical	40.4	32.6	13.4	40.8	32.6	64.7	14.8
Precision production	47.1	44.1	9.6	39.7	32.6	64.6	7.0
Operators and laborers	32.8	28.6	10.6	32.0	26.9	56.6	9.8
Service occupations	23.9	17.9	6.6	28.7	19.6	51.5	6.2
Self-employed	102.9	44.6	11.2	88.8	50.7	58.8	11.6
Retired	26.3	16.1	25.0	26.5	14.5	47.9	25.7
Other not working	16.2	8.3	6.7	23.1	12.1	42.7	7.8
Current industry of head							
Manufacturing, mining, construction	52.2	41.1	20.5	53.0	40.3	62.5	18.4
Infrastructure, wholesale trade, FIRE[1]	71.9	46.5	12.4	64.5	40.3	63.8	11.4
Retail trade, services, agriculture	53.4	33.2	35.4	52.2	33.6	62.3	36.7
Not working	24.2	14.0	31.7	25.7	13.8	46.7	33.5
Housing status							
Owner	58.2	38.1	63.8	54.8	36.8	63.3	63.8
Renter or other	25.0	16.3	36.2	27.3	17.6	46.6	36.2

1. Infrastructure covers the transportation, communications, and utilities industries. FIRE covers the finance, insurance, and real estate industries.

consumption is less than their income, they add to their assets or pay down their debts; and if their consumption exceeds income, they decrease their net worth, either by drawing down existing assets or by borrowing. In the 1992 SCF, respondents were asked whether over the previous year they had spent more than their current income, about as much, or less. From this self-description, one can roughly distinguish families who were saving from those who were dissaving or borrowing.[6] Only about 57 percent of families reported that they had saved, according to this definition (table 1). The proportion who had saved rises steadily with income and education and tends to decline after age 65. The proportion of families who had saved was also relatively high among non-Hispanic whites and families with heads employed in professional, technical, or skilled blue-collar occupations.

Families reported many reasons for saving. The most frequently reported reason was to increase their liquidity, a general category that included many responses, the most specific of which were ‘‘saving for reserves against unemployment’’ and ‘‘saving in case of illness’’ (table 2).[7] In both 1989 and 1992, more than 41 percent reported that liquidity-related concerns were an important motivation for saving. At the same time, the proportion of families reporting retirement as a reason for saving rose nearly 3 percentage points to 26.6 percent in 1992. Much of this increase resulted from growth in the share of families with middle-aged heads. The proportion of families citing educational expenses as an important reason for saving also rose, again reflecting the larger share of families with middle-aged heads.

NET WORTH

As with family income, some clear patterns across demographic groups are apparent in the distribution of net worth, which is defined as total assets less total debts (table 3).[8] Mean and median net worth increase strongly with income and formal education. And like income, net worth rises with the age group of the head, peaking in late middle age and then declining. Between 1989 and 1992, real mean family net worth rose 11.7 percent, whereas the median remained about the same (around $52,000).[9]

When disaggregated over demographic categories, the distribution of net worth can be surprisingly variable, even over a three-year period. The most notable of such variations in this period is the rise in the mean and median net worth of nonwhites and Hispanics. The median for this group rose from $6,200 in 1989 to $11,900 in 1992. Over the same period, the net worth of other families declined from $77,100 to $72,200.[10] These changes parallel the income changes observed for these groups, but the changes in net worth were larger. In both 1989 and 1992, the distribution of net worth for nonwhites and Hispanics appears to be approximately bimodal, that is, the distribution shows concentrations of families around two different levels

6. This information is available only in the 1992 SCF. The underlying questions allow us to take into account the purchase of durables, which we treat as a type of saving. For a more detailed analysis of the saving data, see Arthur B. Kennickell, ‘‘Saving and Permanent Income,’’ Working Paper (Board of Governors of the Federal Reserve System, Division of Research and Statistics, 1994).

7. Families were asked to report their reasons for saving even if they were not currently saving.

8. The measure of assets used here excludes families' future benefits under defined-benefit pension plans, defined-contribution plans from which neither withdrawals nor loans can be made, and future social security benefits.

9. Data from the 1988 and 1991 Survey of Income and Program Participation (SIPP) of the U.S. Bureau of the Census show a 12 percent decrease in real median net worth over that period.

10. Published figures from the SIPP do not allow us to construct the same race–ethnicity categories as those in the SCF. However, data from the 1988 and 1991 SIPP show no significant change in median net worth for blacks and a significant decline for whites.

2. Proportion of families citing selected reasons as most important for saving, 1989 and 1992

Percent

Reason	1989	1992
Education	11.4	14.3
For the family	4.3	4.4
Buying own home	6.3	5.6
Purchases	13.0	10.2
Retirement	23.8	26.6
Liquidity	41.4	42.0
Investments	9.6	10.0
Other reasons	8.8	8.4

Note. Figures sum to more than 100 percent because some families cited more than one reason as most important.

of net worth. One group of these families had net worth near zero, while another had net worth concentrated around a higher level. For non-Hispanic whites, the distribution appears to have only one concentration around a positive level of net worth. Indeed, if confined to families with $500 or more of net worth, the analysis shows that the median net worth of nonwhites and Hispanics remained fairly steady, at $30,400 in 1989 and $31,800 in 1992, while the median net worth of other families declined from $90,400 in 1989 to $87,000 in 1992. At the same time, the proportion of nonwhite and Hispanic families with less than $500 of net worth fell from 32.4 percent in 1989 to 25.3 percent in 1992, and the proportion of non-Hispanic whites with net worth of less than $500 held steady at about 8 percent. Thus, the rise in the overall net worth of nonwhites and Hispanics may be attributed largely to a movement of families out of the low-wealth group.

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

Thousands of 1992 dollars except as noted

Family characteristic	1989			1992		
	Mean	Median	Percentage of families	Mean	Median	Percentage of families
All families	**197.2**	**51.5**	**100**	**220.3**	**52.2**	**100**
Income (1992 dollars)						
Less than 10,000	24.4	1.7	16.9	44.3	3.9	17.6
10,000–24,999	77.5	26.0	26.1	73.0	23.4	28.0
25,000–49,999	118.9	58.7	30.5	144.3	58.3	27.8
50,000–99,999	225.3	127.4	19.6	283.8	139.6	19.3
100,000 and more	1,344.7	450.3	6.9	1,324.2	569.0	7.3
Age of head (years)						
Less than 35	60.4	8.4	27.2	60.2	10.4	25.9
35–44	156.0	63.1	23.4	157.0	46.3	22.7
45–54	308.1	103.9	14.4	304.5	97.1	16.2
55–64	304.5	100.6	13.9	371.0	133.3	13.1
65–74	306.4	80.5	12.0	369.8	103.6	12.7
75 and more	228.4	75.8	9.0	257.6	87.0	9.4
Education of head						
0–8 grade	75.2	25.2	12.9	75.2	21.1	9.4
9–12 grade	93.6	27.4	11.4	96.7	21.2	10.7
High school diploma	122.4	39.6	32.1	126.8	40.8	29.6
Some college	194.3	51.3	15.1	210.6	55.6	17.7
College degree	379.5	119.2	28.5	392.9	113.0	32.6
Race or ethnicity of head						
White non-Hispanic	237.9	77.1	75.1	256.0	72.2	77.9
Nonwhite or Hispanic	74.8	6.2	24.9	95.1	11.9	22.1
Current work status of head						
Professional, managerial	238.8	97.1	16.9	262.7	86.2	17.2
Technical, sales, clerical	90.0	37.3	13.4	125.3	45.4	14.8
Precision production	85.8	53.2	9.6	91.6	34.9	7.0
Operators and laborers	61.2	21.0	10.6	58.0	20.3	9.8
Service occupations	48.5	8.5	6.6	55.9	14.7	6.2
Self-employed	696.9	182.7	11.2	666.1	196.9	11.6
Retired	181.3	70.6	25.0	229.4	71.1	25.7
Other not working	56.8	0.7	6.7	64.2	4.0	7.8
Current industry of head						
Manufacturing, mining, construction	177.6	56.9	20.5	220.9	57.9	18.4
Infrastructure, wholesale trade, FIRE[1]	326.3	85.9	12.4	326.6	60.9	11.4
Retail trade, services, agriculture	201.4	41.8	35.4	213.8	49.0	36.7
Not working	155.0	47.5	31.7	191.2	47.9	33.5
Housing status						
Owner	283.7	109.0	63.8	317.1	108.5	63.8
Renter or other	45.0	2.2	36.2	49.9	3.7	36.2

1. Infrastructure covers the transportation, communications, and utilities industries. FIRE covers the finance, insurance, and real estate industries.

Results for other groups were mixed and in many instances reflected the macroeconomic events during the period. Across age groups, there were broad increases in net worth for families headed by persons aged 55 and above. Median net worth for families with more than $100,000 of income rose more than 26 percent, while mean net worth fell slightly for this group, suggesting that a relatively small number of very wealthy families experienced declines.

Mean and median net worth increased for families in the lowest income group. This rise appears to reflect, in part, a compositional shift in this group, with the recession temporarily pushing some families with a relatively high level of assets down into the lowest income group. Nearly 39 percent of families in this group reported having income below their usual level, a higher proportion than the 22.6 percent rate for families overall. The inclusion of this group with other low-income families partially accounts for the counterintuitive rise in median net worth for families headed by persons who were not working.

By definition, net worth may vary because of an increase or decrease in assets or in the level of debt. The decisions families make to hold particular assets and liabilities reflect their individual needs and risk assessments. Most of the remainder of this article discusses families' portfolio choices.

ASSETS

Continuing a trend observed since the 1983 SCF, an overall rise occurred in the share of financial assets in families' asset portfolios between 1989 and 1992. There were corresponding declines in the shares of primary residences and other nonfinancial assets.

Financial Assets

The composition of financial assets held by families changed substantially between 1989 and 1992 (table 4). The proportion of financial assets accounted for by mutual funds, retirement accounts, and stocks rose, with offsetting declines in holdings of transaction accounts, certificates of deposit, and bonds.

4. Distribution of amount of financial assets of all families, by type of asset, 1989 and 1992

Percent

Financial asset	1989	1992
Transaction accounts	19.7	16.4
Certificates of deposit	10.4	7.9
Mutual funds (excluding money market funds)	5.0	7.2
Stocks	14.6	21.0
Bonds	11.0	7.7
Retirement accounts	18.8	22.7
Savings bonds	1.6	1.1
Cash value of life insurance	6.2	5.7
Other managed assets	6.6	6.4
Other	6.0	3.9
Total	100	100
Memo		
Financial assets as a percentage of total assets	27.9	32.3

Transaction Accounts

The proportion of families with some type of transaction account—including checking, savings, and money market accounts—rose from 85.1 percent in 1989 to 87.5 percent in 1992, while the median value of such accounts increased about $100 (table 5). Account ownership increased most notably for families in the lowest income group, in part reflecting the effects of recession on the composition of this group. Account ownership also rose among families headed by persons between 55 and 64 years of age, nonwhites and Hispanics, and renters. Over this period, the proportion of families with deposits of more than $100,000 in institutions covered by deposit insurance—and thus potentially having some deposits not covered by federal deposit insurance—rose from 3.1 percent to 4.7 percent in 1992.[11]

Although the overwhelming majority of families has some type of transaction account, and the share

11. A detailed description of the changes in the arrangement of families' accounts may be found in Arthur B. Kennickell, Myron L. Kwast, and Martha Starr-McCluer, "Reducing Households' Deposit Insurance: Evidence and Analysis of Potential Reforms," Working Paper (Board of Governors of the Federal Reserve System, Division of Research and Statistics, 1994).

appears to be increasing, the proportion of families without such accounts—12.5 percent in 1992—is still substantial. For the most part, these families have low incomes and are nonwhite or Hispanic. The discussion in the box provides some information on the reasons some families have no such accounts.

Certificates of Deposit and Mutual Funds

Against the backdrop of a sharp decline in interest rates on deposits, the SCF data show a large decrease in the ownership of certificates of deposit—from 19.4 percent of families in 1989 to 16.6 percent in 1992—along with a strong offsetting rise in ownership of mutual funds—from 7.1 percent of families in 1989 to 11.2 percent in 1992.[12] For both assets, these changes were broadly distributed across demographic groups. For families with certificates of deposit, median holdings rose slightly, though sizable increases occurred in holdings for families in the groups with heads between 55 and 74 years of age, groups that also experienced large increases in net worth. In contrast, the value of mutual fund holdings rose for most groups and fell substantially only for families headed by persons aged 75 and over and for nonwhite and Hispanic families.

Stocks and Bonds

Overall, ownership of directly held stocks and bonds moved in opposite directions, with increases in ownership and median holdings of stocks and corresponding declines for bonds.[13] Families with incomes of $100,000 or more experienced large declines in ownership of both assets, though median holdings of owners rose substantially. The changes for this higher-income group suggest that families with relatively small holdings may have moved into other assets, such as mutual funds. Median holdings of stocks and bonds also rose for the remaining groups of families with incomes of more than $25,000. For families with heads in

12. The mutual fund figures do not include money market mutual funds or individual retirement accounts, Keogh accounts, or any type of pension plan invested in mutual funds. Further information on mutual funds is reported in Phillip R. Mack, ''Recent Trends in the Mutual Fund Industry,'' *Federal Reserve Bulletin,* vol. 79 (November 1993), pp. 1001–12.

13. This discussion covers only stocks and bonds that are directly held by families outside mutual funds or individual retirement, Keogh, or pension accounts.

Why Families Do Not Have Checking Accounts

The proportion of families without any type of transaction account fell from 14.9 percent in 1989 to 12.5 percent in 1992, possibly because of banks' efforts to improve access to basic banking services. The survey asked families who had no transaction account why they did not have a checking account. In 1992, 20.1 percent of these families, up from 15.1 percent in 1989, reported that either bank service charges or minimum balance requirements deterred them from having a checking account (see table below). For families with less than $10,000 of income, these reasons were cited by 9.2 percent of the group in 1989 and 18.2 percent in 1992. Higher-income families were more likely to cite these reasons in both years.

More than 60 percent of families in 1989 and 1992 with incomes of less than $10,000 reported that they either did not write enough checks for an account to be worthwhile or that they did not have enough money. An underlying explanation for these responses may be that these families were too poor for a transaction account to be useful. Inconvenient hours or location were cited by a negligible fraction of families in both years.

Reasons reported by families without any type of transaction account for not having a checking account, 1989 and 1992

Percent

Response category	1989	1992
Do not write enough checks to make it worthwhile	33.5	28.3
Minimum balance is too high	7.7	8.1
Do not like dealing with banks	14.6	14.8
Service charges are too high	7.4	12.0
No bank has convenient hours or location	1.3	.3
Do not have enough money	24.6	22.0
Cannot manage or balance a checking account	4.5	4.4
Other	6.6	10.1
Total	100	100

5. Family holdings of financial assets, by selected characteristics of families and type of asset, 1989 and 1992

A. 1989 Survey of Consumer Finances

Family characteristic	Trans-action accounts	CDs	Mutual funds	Stocks	Bonds	Retire-ment accounts	Savings bonds	Life insurance	Other managed	Other financial	All financial assets
	Percentage of families holding assets										
All families	**85.1**	**19.4**	**7.1**	**16.2**	**5.3**	**35.4**	**23.8**	**34.7**	**3.5**	**13.4**	**88.4**
Income (1992 dollars)											
Less than 10,000	52.4	6.5	*	*	*	2.6	3.8	12.4	*	8.3	57.6
10,000–24,999	81.0	20.7	2.9	8.9	1.8	14.9	14.5	24.8	2.7	12.1	86.0
25,000–49,999	95.0	20.6	6.9	14.0	5.3	43.7	27.6	39.0	2.5	14.8	97.7
50,000–99,999	98.6	23.2	12.3	27.7	6.9	62.5	43.8	51.7	6.2	12.9	99.6
100,000 and more	98.9	30.2	25.6	57.4	27.2	79.4	34.0	59.5	10.4	26.2	99.6
Age of head (years)											
Less than 35	79.9	8.5	2.2	10.9	1.6	26.6	25.4	24.5	2.6	14.3	84.3
35–44	86.2	15.8	7.9	16.9	4.1	47.8	32.8	41.3	2.9	14.2	90.3
45–54	87.4	21.7	9.2	20.7	5.3	49.8	22.2	39.2	3.2	14.9	90.7
55–64	84.8	20.7	9.7	18.6	8.4	42.4	18.9	40.8	3.3	14.3	86.9
65–74	89.2	31.2	9.3	17.1	10.8	27.6	18.1	36.9	5.6	11.1	90.9
75 and more	89.8	40.8	9.8	18.5	7.7	6.0	12.8	28.5	5.4	7.8	90.8
Race or ethnicity of head											
White non-Hispanic	92.3	24.3	9.2	20.2	6.7	42.0	27.9	39.0	4.3	14.3	94.7
Nonwhite or Hispanic	63.7	4.9	1.0	4.4	1.0	15.3	11.5	21.7	1.1	10.7	69.2
Current work status of head											
Professional, managerial	99.1	21.4	11.5	28.4	8.8	63.0	39.2	45.6	4.5	17.4	99.2
Technical, sales, clerical	93.6	14.1	5.6	16.0	3.0	45.9	30.7	32.5	4.4	13.2	97.0
Precision production	90.6	13.1	6.5	14.9	2.4	48.5	35.7	43.4	2.4	14.2	94.1
Operators and laborers	77.3	9.7	3.0	7.1	*	28.0	20.1	30.4	3.0	10.6	83.5
Service occupations	69.5	11.2	2.1	4.1	*	21.3	12.1	23.3	*	12.7	78.1
Self-employed	96.0	23.3	11.3	22.9	9.2	43.7	23.9	46.4	3.5	21.5	98.7
Retired	83.2	32.0	8.0	15.7	8.0	17.2	14.9	31.0	4.3	9.2	84.8
Other not working	42.1	4.4	1.2	5.1	*	5.3	4.1	11.2	.9	10.1	49.5
Housing status											
Owner	94.4	24.6	9.8	21.8	7.0	46.6	28.9	44.2	4.7	12.9	95.9
Renter or other	68.9	10.3	2.3	6.4	2.3	15.6	14.7	17.9	1.3	14.2	75.2
	Median value of holdings for families holding such assets (thousands of 1992 dollars)										
All families	**2.3**	**12.6**	**11.2**	**7.3**	**27.9**	**11.2**	**.6**	**3.4**	**22.3**	**2.8**	**12.0**
Income (1992 dollars)											
Less than 10,000	.6	14.5	*	*	*	1.7	.7	.9	*	1.0	1.2
10,000–24,999	1.1	14.5	11.2	5.6	27.9	4.2	.6	1.7	22.3	1.3	3.8
25,000–49,999	2.3	11.2	7.8	4.0	17.9	8.8	.6	2.7	27.9	2.2	11.3
50,000–99,999	4.5	11.2	8.9	5.6	11.2	14.5	.7	5.0	22.3	3.9	25.6
100,000 and more	19.3	27.9	30.2	22.1	44.7	50.3	1.1	8.9	44.7	22.3	160.9
Age of head (years)											
Less than 35	1.3	4.5	1.3	3.4	7.8	4.5	.5	2.2	17.9	.8	3.0
35–44	2.5	7.8	4.5	3.9	13.0	10.1	.6	3.6	13.4	2.8	15.5
45–54	2.9	11.2	11.2	5.6	11.2	14.5	.6	4.5	8.9	4.1	18.2
55–64	3.4	15.1	22.3	20.4	39.1	26.8	1.8	5.6	35.7	5.6	23.6
65–74	3.6	19.5	19.0	31.3	38.0	13.4	1.7	2.2	53.6	11.2	19.1
75 and more	4.9	30.2	33.5	19.0	31.3	27.9	3.4	2.2	35.7	11.2	28.7
Race or ethnicity of head											
White non-Hispanic	3.0	12.6	11.2	7.8	30.2	11.5	.7	3.4	27.9	3.4	16.8
Nonwhite or Hispanic	1.2	12.3	29.7	2.2	27.9	6.7	.4	2.0	8.9	.8	2.2
Current work status of head											
Professional, managerial	4.5	11.2	11.2	5.6	21.7	16.3	.6	4.5	34.6	2.2	23.5
Technical, sales, clerical	1.7	5.6	2.7	2.7	5.6	7.3	.4	2.2	39.1	1.3	7.4
Precision production	2.1	6.0	4.6	4.5	3.4	8.7	.6	3.4	3.9	2.2	12.2
Operators and laborers	1.1	11.2	3.4	2.9	*	8.9	.6	2.7	6.7	2.2	4.4
Service occupations	1.2	6.7	1.0	3.4	*	3.4	.5	.8	*	.3	2.2
Self-employed	5.0	16.8	29.7	10.9	39.1	23.5	.6	5.6	33.5	6.7	18.5
Retired	3.4	22.3	22.3	22.7	33.5	15.6	2.0	2.2	50.3	8.9	18.3
Other not working	.9	2.2	6.6	33.5	*	2.2	.7	1.1	11.2	.7	1.3
Housing status											
Owner	3.4	16.8	14.5	7.8	31.3	13.4	.7	3.4	22.3	5.0	20.1
Renter or other	1.2	7.8	2.2	5.6	13.0	4.5	.6	2.1	24.6	1.1	2.6

Note. * Fewer than five observations.

5.—Continued

B. 1992 Survey of Consumer Finances

Family characteristic	Trans-action accounts	CDs	Mutual funds	Stocks	Bonds	Retire-ment accounts	Savings bonds	Life insurance	Other managed	Other financial	All financial assets
	Percentage of families holding assets										
All families	**87.5**	**16.6**	**11.2**	**17.8**	**4.7**	**39.3**	**22.7**	**35.3**	**4.3**	**11.4**	**90.7**
Income (1992 dollars)											
Less than 10,000	63.7	11.1	3.3	4.2	1.0	7.0	6.6	16.3	.9	9.7	70.2
10,000–24,999	83.7	15.1	5.7	8.8	1.9	21.6	13.3	26.4	2.4	10.7	88.1
25,000–49,999	95.4	17.1	11.8	18.2	3.7	45.2	27.9	40.9	4.7	11.5	98.2
50,000–99,999	98.7	22.2	18.5	31.0	6.9	70.7	39.5	48.1	6.8	12.1	99.3
100,000 and more	98.7	19.5	29.9	48.7	22.4	78.6	32.1	60.2	11.6	16.0	98.7
Age of head (years)											
Less than 35	82.5	7.4	5.8	11.1	1.4	29.7	22.8	26.2	1.9	13.1	86.8
35–44	86.9	9.0	10.8	20.7	3.1	47.3	29.4	35.6	3.3	12.0	90.9
45–54	89.2	15.1	10.5	19.2	6.5	52.9	25.4	40.4	6.0	11.6	93.1
55–64	90.7	21.2	16.6	23.0	5.0	53.4	21.4	44.1	6.0	10.8	92.9
65–74	89.8	31.7	16.5	19.0	9.2	36.7	14.1	38.6	6.3	11.8	91.7
75 and more	91.7	36.6	13.4	18.2	8.3	6.3	14.5	34.4	5.6	5.3	92.6
Race or ethnicity of head											
White non-Hispanic	93.1	19.3	13.5	21.3	5.7	44.0	26.1	38.8	5.2	12.3	95.6
Nonwhite or Hispanic	67.5	7.3	3.1	5.6	1.2	22.5	10.4	23.0	1.1	8.4	73.7
Current work status of head											
Professional, managerial	97.9	16.8	18.8	28.8	8.2	65.8	34.7	45.0	8.3	10.6	99.4
Technical, sales, clerical	93.6	12.9	10.0	18.4	2.6	50.7	30.9	38.1	2.9	12.8	96.8
Precision production	88.0	5.6	7.9	15.8	*	50.2	23.9	35.0	2.5	11.2	90.5
Operators and laborers	79.5	6.6	5.4	12.0	*	31.0	16.3	31.6	*	8.0	84.8
Service occupations	78.1	8.7	4.9	7.4	*	26.3	23.1	23.3	3.2	11.1	85.1
Self-employed	96.2	18.3	16.4	27.7	8.1	48.9	24.0	42.9	3.7	19.5	97.8
Retired	86.3	30.1	11.8	15.1	6.4	22.0	15.3	33.6	5.8	7.6	88.6
Other not working	60.5	5.2	2.2	4.2	1.0	12.7	9.3	17.6	.8	15.6	68.3
Housing status											
Owner	94.2	21.6	14.9	23.7	6.6	49.1	28.0	43.6	5.8	10.3	96.0
Renter or other	75.7	7.9	4.6	7.5	1.4	21.8	13.3	20.7	1.7	13.4	81.5
	Median value of holdings for families holding such assets (thousands of 1992 dollars)										
All families	**2.4**	**13.5**	**18.0**	**10.0**	**25.0**	**15.0**	**.7**	**4.0**	**25.0**	**2.8**	**13.1**
Income (1992 dollars)											
Less than 10,000	.7	7.0	15.0	10.0	15.7	9.0	.5	1.2	12.0	1.2	1.5
10,000–24,999	1.1	16.0	7.0	4.0	11.0	5.1	.5	2.8	20.0	2.0	3.9
25,000–49,999	2.3	13.0	15.0	5.0	25.0	10.0	.5	4.3	20.0	2.0	14.1
50,000–99,999	5.6	12.0	22.0	8.0	20.0	25.0	1.0	5.0	32.0	7.0	47.0
100,000 and more	25.5	28.0	30.0	40.0	51.0	66.0	1.2	10.5	95.0	40.0	184.0
Age of head (years)											
Less than 35	1.4	5.0	3.8	2.0	10.0	4.7	.4	2.8	20.0	1.0	4.2
35–44	2.2	5.0	18.0	5.0	19.3	9.8	.6	4.0	20.0	3.0	10.8
45–54	3.4	10.0	20.0	12.0	25.2	30.0	1.0	4.8	25.0	2.8	24.7
55–64	4.0	20.0	20.4	20.0	40.0	35.7	1.0	6.5	30.0	5.0	40.1
65–74	4.0	25.0	30.0	24.0	25.3	23.0	.9	4.0	40.0	9.8	30.2
75 and more	4.0	24.0	22.3	28.0	52.0	28.0	1.1	3.0	55.0	5.0	20.2
Race or ethnicity of head											
White non-Hispanic	3.0	13.5	18.0	10.0	25.0	17.0	.7	4.0	27.0	3.0	16.7
Nonwhite or Hispanic	1.0	12.0	18.0	4.1	35.0	7.0	.6	3.8	25.0	1.2	3.5
Current work status of head											
Professional, managerial	3.8	7.5	12.0	10.0	24.3	25.7	1.0	4.5	20.0	3.0	30.3
Technical, sales, clerical	2.0	10.0	10.0	8.0	10.0	9.6	.5	3.0	25.0	1.8	10.5
Precision production	2.0	2.3	6.3	4.8	*	8.9	.3	5.6	18.0	2.0	9.0
Operators and laborers	1.3	6.5	15.0	4.0	*	6.0	.5	3.8	*	1.3	4.6
Service occupations	.8	12.0	4.0	4.0	*	5.1	.7	5.0	2.2	.6	2.4
Self-employed	5.6	12.0	30.0	10.0	45.0	30.0	.6	6.5	95.0	7.0	23.0
Retired	3.0	22.0	28.0	15.0	30.0	20.0	1.0	3.5	40.0	6.0	17.1
Other not working	1.2	10.0	10.6	22.0	44.6	13.0	.5	3.5	6.0	2.0	3.0
Housing status											
Owner	3.6	15.0	20.0	10.0	25.0	20.0	.8	4.4	27.0	5.0	24.0
Renter or other	1.0	10.0	10.0	4.0	20.0	5.5	.5	3.0	20.0	1.6	3.0

Note. * Fewer than five observations.

professional or managerial occupations and for those with heads between 35 and 54 years of age or 75 and older, median holdings of stocks and bonds rose markedly.

Retirement Accounts

The rise in the share of financial assets in household portfolios was driven in part by the increase in holdings of retirement accounts—including individual retirement accounts, Keogh accounts, and employer-provided pension plans from which withdrawals can be made, such as 401(k) accounts. Continuing trends evident in earlier surveys, retirement accounts rose from 18.8 percent of total family financial assets in 1989 to 22.7 percent in 1992. Ownership of retirement accounts went up markedly for all groups, increasing overall from 35.4 percent of families to 39.3 percent. Median holdings of these assets rose 33.9 percent, and the gains were spread among most of the groups considered. The increase in the median value of holdings was particularly notable for the families with heads between 45 and 64 years of age, a group that traditionally has retirement as an important motive for saving.

Among families with at least one worker, the percentage having any type of pension was nearly unchanged at 55.9 percent in 1989 and 56.5 percent in 1992, while the percentage having 401(k)-like plans rose from 26.5 percent to 30.7 percent.[14] In contrast, coverage of worker families by conventional defined-benefit pension plans, that is, plans that offer a guaranteed income at retirement, declined over the three-year period from 48.8 percent to 45.1 percent. Much of the growth in ownership of 401(k)-like accounts took place among families who did not have other types of employer-provided pension plans, although the median value of the holdings in such accounts rose only for those who also had another type of plan.

Remaining Financial Assets

There were few notable changes in the holdings of the remaining financial assets. The overall proportion of families holding savings bonds fell slightly between 1989 and 1992, while the median value of holdings rose slightly. For life insurance that has a cash value, ownership and the median value of holdings rose somewhat. Other managed assets—including trusts, annuities, managed investment accounts, and other such assets—were not widely held in either year, though the proportion of families with these assets rose slightly over the three-year period. The percentage of families owning other financial assets—a diverse category covering such items as futures contracts, oil and gas leases, royalties, future proceeds from an estate, and loans to friends or relatives—fell between 1989 and 1992, although the median value of holdings was unchanged.

Nonfinancial Assets

Overall, the composition of nonfinancial assets held by families was largely unchanged between 1989 and 1992 (table 6). A slight decline in the share of nonfinancial assets accounted for by primary residences and vehicles was roughly offset by a gain in the share of investment real estate.

Ownership and the median value of nonfinancial assets tend to increase with income (table 7). These measures also tend to increase as the age of the family head increases until late middle age, when they begin to flatten out or decline, as the portfolio share of financial assets rises.

Primary Residence

The primary residence was the largest part of nonfinancial assets for families, accounting for

6. Distribution of amount of nonfinancial assets of all families, by type of asset, 1989 and 1992
Percent

Nonfinancial asset	1989	1992
Primary residence	44.1	43.5
Investment real estate	21.3	22.0
Business assets	27.0	27.2
Vehicles	5.4	4.9
Other nonfinancial assets	2.1	2.4
Total	100	100
Memo		
Nonfinancial assets as a percentage of total assets	72.1	67.7

14. These figures include pensions from both current and previous jobs.

43.5 percent of these assets in 1992. Indeed, this share was about as large as that for all financial assets held directly by families. Between 1989 and 1992, the proportion of families who owned homes remained steady at 63.8 percent, while real median house values increased about 4.6 percent. In a continuation of earlier trends evident since at least 1983, increases in ownership and median house value were particularly pronounced for families headed by persons aged 75 and older, with smaller increases for the 65-to-74 age group. The recent increase may mirror both the effects of rising wealth and improving health among older people, who are thus better able to maintain a home, and slack in real estate markets in many areas, which may have led people to hold homes longer than they would otherwise have done.

Investment Real Estate

Overall, ownership and median holdings of investment real estate—which includes vacation homes, rental units, commercial property, vacant land, and all other real estate except a primary residence and property owned through a business—were unchanged. However, there were a few important shifts for some demographic groups. Families headed by persons aged 55 to 74 were more likely to have such property, and the median value of their holdings rose. Although the ownership rate of investment real estate for nonwhites and Hispanics declined somewhat, the median value of their holdings rose 18.4 percent.

Business Assets

Likely reflecting the increase in business formation that typically occurs at the beginning of an economic recovery, direct holdings by families of an equity interest in a business—including sole proprietorships, limited partnerships, other partnerships, subchapter S corporations, other corporations that are not publicly traded, and other private businesses—moved up 1.7 percentage points between 1989 and 1992. This increase was particularly notable for families headed by persons aged 55 to 64. Ownership for nonwhites and Hispanics rose from 6.7 percent of families in 1989 to 8.3 percent in 1992, compared with the movement from 15.3 percent to 16.8 percent for non-Hispanic whites. The median value of business assets of nonwhite and Hispanic families rose dramatically from $3,400 in 1989 to $55,000 in 1992, while the median for the other business owners moved down from $55,900 in 1989 to $50,000 in 1992. Because nonwhite and Hispanic business owners are a smaller proportion of the population than non-Hispanic white owners, however, the estimate of the median value of business holdings for non-whites and Hispanics is less precise than that for the rest of the population. The survey data also indicate substantial increases in median business values for families with $100,000 or more of income and for those headed by persons between the ages of 45 and 74.

Vehicles

Vehicles—including automobiles, motorcycles, vans, trucks, jeeps, sport utility vehicles, motor-homes, recreational vehicles, airplanes, and boats—are the most widely held nonfinancial asset, with 86.4 percent of families having had some type of vehicle in 1992.[15] This figure represents an increase of 2.8 percentage points over the level in 1989. Ownership jumped for households headed by persons aged 65 and over and for nonwhites and Hispanics, although overall the median value of holdings declined. The decline was most marked for families headed by persons younger than 55 and families with more than $50,000 of income. Underlying the overall vehicle trends, the types of vehicles selected by families changed, with the percentage of families owning a van, sport utility vehicle, or jeep rising from 11.0 percent in 1989 to 16.9 percent in 1992.

In recent years, vehicle leasing has become somewhat more common as a substitute for outright ownership. The SCF indicates that in 1989, 2.4 percent of families leased vehicles for personal use and that by 1992 that figure had risen to

15. This figure covers only personally owned vehicles. In 1992, 4.8 percent of families had at least one vehicle provided by their employer for their personal use.

7. Family holdings of nonfinancial assets, by selected characteristics of families and type of nonfinancial asset, 1989 and 1992

A. 1989 Survey of Consumer Finances

Family characteristic	Primary residence	Investment real estate	Business	Vehicles	Other non-financial	All nonfinancial assets
	Percentage of families holding assets					
All families	**63.8**	**20.0**	**13.2**	**83.6**	**11.9**	**89.1**
Income (1992 dollars)						
Less than 10,000	32.4	4.2	2.5	48.4	5.1	62.9
10,000–24,999	53.9	13.7	9.2	80.6	7.5	86.6
25,000–49,999	68.9	20.1	11.2	94.8	13.2	97.0
50,000–99,999	85.3	29.6	20.6	96.7	17.0	99.2
100,000 and more	94.1	54.0	42.1	94.4	24.2	99.5
Age of head (years)						
Less than 35	37.6	7.9	10.3	80.6	9.4	83.0
35–44	67.1	21.1	19.5	89.2	13.7	92.0
45–54	77.3	29.3	18.7	91.0	14.8	93.4
55–64	80.2	30.0	12.6	86.1	12.5	90.9
65–74	77.1	25.0	8.1	81.1	12.8	92.6
75 and more	69.6	16.3	4.4	66.1	7.8	85.8
Race or ethnicity of head						
White non-Hispanic	70.5	22.5	15.3	89.3	14.0	94.2
Nonwhite or Hispanic	43.5	12.3	6.7	66.7	5.4	73.8
Current work status of head						
Professional, managerial	73.0	26.2	9.3	94.8	16.6	97.2
Technical, sales, clerical	55.7	12.2	7.4	87.2	10.9	88.9
Precision production	71.2	19.2	8.6	96.8	11.9	98.2
Operators and laborers	56.0	14.4	6.4	87.1	7.6	89.5
Service occupations	42.9	12.8	4.6	75.4	7.3	79.4
Self-employed	74.1	38.1	69.7	94.7	21.0	98.6
Retired	72.5	20.1	3.7	74.5	9.3	87.3
Other not working	29.3	6.4	1.6	47.8	7.5	56.2
Housing status						
Owner	100.0	25.9	16.5	92.9	14.1	100.0
Renter or other	.0	9.6	7.3	67.3	8.0	70.0
	Median value of holdings for families holding such assets (thousands of 1992 dollars)					
All families	**78.2**	**48.0**	**50.3**	**7.7**	**7.8**	**74.5**
Income (1992 dollars)						
Less than 10,000	27.9	15.1	22.3	1.8	1.1	9.2
10,000–24,999	55.9	20.1	12.3	4.7	5.6	42.1
25,000–49,999	72.6	42.5	33.5	7.7	5.6	74.8
50,000–99,999	111.7	55.9	50.3	12.9	11.2	138.2
100,000 and more	223.4	148.8	156.4	17.9	23.5	369.8
Age of head (years)						
Less than 35	72.6	31.3	22.3	6.4	5.6	17.5
35–44	89.4	51.4	50.3	9.1	7.5	96.3
45–54	93.8	62.6	58.6	10.6	8.9	117.7
55–64	83.8	44.8	89.4	7.5	11.2	102.2
65–74	59.0	33.5	59.2	5.5	7.7	68.9
75 and more	55.9	43.6	78.2	4.4	9.3	56.8
Race or ethnicity of head						
White non-Hispanic	80.4	51.4	55.9	8.4	8.4	82.9
Nonwhite or Hispanic	55.9	38.0	3.4	4.8	5.6	31.0
Current work status of head						
Professional, managerial	117.3	58.1	61.4	9.5	8.9	118.2
Technical, sales, clerical	93.8	33.5	9.4	7.7	5.6	71.5
Precision production	71.5	22.3	5.6	9.5	5.6	72.0
Operators and laborers	55.9	24.6	86.0	6.8	5.6	41.6
Service occupations	78.2	22.3	33.5	6.1	4.5	34.9
Self-employed	111.7	80.4	62.6	11.3	15.6	199.9
Retired	61.4	39.4	76.0	5.1	7.3	65.6
Other not working	38.0	33.5	84.8	2.4	1.9	12.6
Housing status						
Owner	78.2	50.3	58.6	9.4	8.9	107.6
Renter or other	*	33.5	11.2	4.3	5.6	5.6

Note. * Fewer than five observations.

7.—Continued

B. 1992 Survey of Consumer Finances

Family characteristic	Primary residence	Investment real estate	Business	Vehicles	Other non-financial	All nonfinancial assets
	Percentage of families holding assets					
All families	**63.8**	**20.0**	**14.9**	**86.4**	**8.5**	**91.3**
Income (1992 dollars)						
Less than 10,000	38.8	5.9	3.6	55.8	5.0	67.8
10,000–24,999	54.2	12.3	8.4	88.2	5.7	92.2
25,000–49,999	68.8	20.3	14.1	93.9	8.2	97.5
50,000–99,999	84.2	30.6	23.6	96.9	11.3	99.1
100,000 and more	87.6	54.2	46.4	96.8	21.6	100.0
Age of head (years)						
Less than 35	37.0	8.4	11.3	84.8	8.1	86.7
35–44	64.1	17.1	20.1	89.3	9.3	93.0
45–54	75.5	26.6	18.9	92.5	10.1	94.5
55–64	77.9	35.8	19.2	87.2	6.7	93.1
65–74	78.9	26.7	11.3	86.3	7.9	92.0
75 and more	76.7	16.6	4.1	72.4	8.4	90.7
Race or ethnicity of head						
White non-Hispanic	69.5	22.5	16.8	90.6	9.9	94.9
Nonwhite or Hispanic	43.8	11.0	8.3	71.9	3.9	78.6
Current work status of head						
Professional, managerial	67.2	24.8	11.9	94.6	12.0	97.1
Technical, sales, clerical	62.0	16.2	10.2	91.9	7.3	94.3
Precision production	61.3	19.1	6.9	92.6	10.0	95.3
Operators and laborers	56.7	14.7	4.1	90.2	8.3	92.5
Service occupations	47.3	5.2	6.4	81.5	6.6	85.0
Self-employed	76.6	37.3	74.6	95.0	13.8	98.4
Retired	73.3	21.1	4.8	78.7	5.7	89.3
Other not working	33.5	6.5	2.5	64.4	5.4	68.4
Housing status						
Owner	100.0	26.0	19.1	93.3	9.7	100.0
Renter or other	.0	9.5	7.5	74.4	6.5	75.9
	Median value of holdings for families holding such assets (thousands of 1992 dollars)					
All families	**81.8**	**50.0**	**50.0**	**6.9**	**7.2**	**69.5**
Income (1992 dollars)						
Less than 10,000	40.0	33.0	29.0	2.4	1.5	20.6
10,000–24,999	50.0	21.0	20.0	4.3	5.0	34.3
25,000–49,999	75.0	45.0	55.5	8.1	5.0	71.5
50,000–99,999	115.0	65.0	25.0	11.0	12.0	140.3
100,000 and more	225.0	160.0	260.0	14.9	20.0	442.3
Age of head (years)						
Less than 35	69.0	40.0	19.3	5.9	3.5	16.6
35–44	90.0	38.5	45.0	7.6	8.5	82.3
45–54	95.0	70.0	100.3	8.6	11.3	101.5
55–64	85.0	55.0	92.0	8.3	10.4	114.2
65–74	70.0	60.0	80.0	5.6	11.0	79.0
75 and more	70.0	52.0	80.0	4.5	5.0	70.3
Race or ethnicity of head						
White non-Hispanic	85.0	52.0	50.0	7.4	7.5	79.7
Nonwhite or Hispanic	51.0	45.0	55.0	4.9	7.0	34.6
Current work status of head						
Professional, managerial	120.0	75.0	20.0	9.0	8.0	103.6
Technical, sales, clerical	83.0	45.0	10.0	7.5	7.0	67.5
Precision production	77.0	35.0	10.0	8.0	4.5	66.5
Operators and laborers	55.0	25.0	17.0	5.8	2.8	36.3
Service occupations	65.0	40.0	35.0	4.5	4.5	21.8
Self-employed	145.0	95.0	80.0	10.4	15.0	206.4
Retired	65.0	50.0	75.0	4.8	7.0	65.5
Other not working	54.0	30.0	31.8	4.2	9.0	20.3
Housing status						
Owner	81.8	53.0	70.0	8.5	10.0	108.9
Renter or other	*	50.0	19.3	4.2	4.0	5.1

Note. * Fewer than five observations.

3.0 percent.[16] Over this time, the prevalence of leasing rose particularly among families with high incomes. In 1992, 10.1 percent of families with incomes of $100,000 or more leased a vehicle for personal use, up from 4.8 percent in 1989. The increase in leasing by this group may partially offset the decline in the median value of vehicles owned by such families.

Other Nonfinancial Assets

The proportion of families owning other nonfinancial assets—a broad category including artwork, jewelry, precious metals, antiques, and other tangible assets—declined from 11.9 percent in 1989 to 8.5 percent in 1992. This decline was spread over most of the demographic groups considered. At the same time, among families owning such assets, the median value of holdings also fell, though changes by demographic groups were more mixed.

Unrealized Capital Gains

Unrealized capital gains are an important factor in changes in total assets. The survey offers some information on the distribution of unrealized capital gains on primary residences, investment real estate, businesses, and stocks and mutual funds held outside retirement accounts. The median net unrealized capital gain over all families, including those who did not have assets, declined from $10,600 in 1989 to $7,500 in 1992 (table 8). Shifts in the real value of homes accounted for most of this change. However, mean net gains rose slightly over the period. This rise reflected increases in unrealized gains on assets other than primary residences for a relatively small fraction of the population. By age groups, increases in mean net gains were concentrated among families headed by persons between 55 and 74 years of age, though the median rose only for those headed by persons aged 65 and over.

16. The SCF does not collect information on families' leasing of vehicles for business purposes.

8. Family unrealized capital gains, by selected characteristics of families, 1989 and 1992
Thousands of 1992 dollars

Family characteristic	1989		1992	
	Mean	Median	Mean	Median
All families	**79.0**	**10.6**	**82.4**	**7.5**
Income (1992 dollars)				
Less than 10,000	9.3	.0	14.9	.0
10,000–24,999	33.5	1.2	29.8	.5
25,000–49,999	48.3	12.8	47.3	8.0
50,000–99,999	84.9	38.5	98.0	30.7
100,000 and more	546.8	131.8	537.0	145.0
Age of head (years)				
Less than 35	24.0	.0	19.2	.0
35–44	60.2	11.9	59.8	5.0
45–54	131.5	37.4	112.3	18.0
55–64	121.3	33.0	144.2	32.0
65–74	120.5	28.6	153.1	30.2
75 and more	89.3	17.5	77.9	26.1

LIABILITIES

In terms of portfolio share, mortgages and other home-equity-based loans account for the largest part of families' borrowing—56.7 percent in 1989 and 63.3 percent in 1992 (table 9). Considering the prominence of housing in families' asset portfolios, the importance of mortgage debt is not surprising.

Families' Holdings of Debt

While total family debt as measured in the SCF fell from 15.9 percent of total assets in 1989 to 14.5 percent in 1992, the proportion of families actually borrowing and the median amount of total debt outstanding changed only slightly

9. Distribution of amount of debt of all families, by type of debt, 1989 and 1992
Percent

Type of debt	1989	1992
Home mortgage and home equity lines of credit	56.7	63.3
Installment loans	13.9	9.2
Credit card balances	2.3	2.8
Other lines of credit	1.0	.8
Investment real estate mortgages	24.5	22.0
Other debt	1.7	1.9
Total	100	100
Memo		
Debt as a percentage of total assets	15.9	14.5

(table 10). The pattern of debt across demographic groups resembles that of nonfinancial assets, with borrowing and the median amount owed rising with income and initially with age, before declining after middle age. This correspondence is to be expected because much of borrowing is associated with the acquisition of nonfinancial assets, particularly homes. The largest change in overall indebtedness occurred in the group of families with incomes of $50,000 or more, for whom the percentage having any debt fell even though the median balance rose. Borrowing rose for families headed by persons aged 65 and over, a group that also experienced gains in net worth.

Mortgages

Although the proportion of families who were homeowners in 1992 was virtually the same as that in 1989, the overall percentage with mortgages—including traditional mortgages, home equity loans, and home equity lines of credit—fell about 1.3 percentage points. However, the median mortgage amount outstanding rose more than the median house value, by 15.8 percent as compared with 4.6 percent for house values. Substantial declines occurred in the prevalence of mortgages among families with more than $50,000 of income and among those in professional occupations, though the median amount owed by these groups moved up. This finding suggests that people with relatively small mortgage balances tended to pay them off over this period. Paralleling the decline in interest rates over the three-year period, the proportion of families who had ever refinanced their current mortgages rose from 10.8 percent in 1989 to 15.0 percent in 1992.

Before the Tax Reform Act of 1986, which phased out the tax deductibility of interest payments other than those for home mortgages, families primarily used mortgages to purchase homes, whereas they used other forms of consumer credit to support other types of consumption. Since 1986, consumers have had a strong incentive to shift toward borrowing secured by home equity. The survey offers some evidence of the prevalence of this type of borrowing. In both years, 6.7 percent of families had either a home equity line of credit or a second mortgage that they reported was not used for the purchase of their home, and such borrowing accounted for about 7 percent of the value of borrowing secured by home equity.[17] For at least two reasons, these figures likely understate the extent of secured borrowing to finance purchases other than homes. First, because money is fungible, it is difficult to determine how the money from a loan is ultimately used. Second, the survey did not ask respondents about how the funds from a first mortgage were used: They are assumed to have been used to purchase a home. However, when mortgages are refinanced, people may extract funds from their accumulated equity beyond what is needed to finance the balance on their existing mortgage. The rise in refinancing noted earlier underscores the potential importance of such borrowing.

Nonmortgage Installment Borrowing

The use of nonmortgage installment borrowing fell off sharply—from 50.1 percent of families in 1989 to 45.8 percent in 1992—and this decline was spread among most of the groups considered here. Modest increases occurred only among families with incomes between $10,000 and $25,000, those with heads under the age of 35, those with heads employed in service occupations, and renters. For those with installment loans outstanding, the amounts owed also tended to decline as the median amount outstanding on such loans fell almost 24 percent. Only those families headed by persons 65 to 74 years of age, a group that experienced a sizable increase in net worth, had an appreciable increase in the median amount owed. Notably, the decline in the percentage of families who borrowed to purchase vehicles and in the amount of such borrowing accounted for the majority of the decline in nonmortgage installment borrowing.

The share of families having credit cards—including bank-type cards (such as Visa, Mastercard, and Discover), store and gasoline company

17. For a more detailed discussion of home-equity-based borrowing, see Glenn B. Canner and Charles A. Luckett, "Home Equity Lending: Evidence from Recent Surveys," *Federal Reserve Bulletin,* vol. 80 (July 1994), pp. 571–83.

10. Family holdings of debts, by selected characteristics of families and type of debt, 1989 and 1992

A. 1989 Survey of Consumer Finances

Family characteristic	Mortgage and home equity	Installment	Credit card	Other lines of credit	Investment real estate	Other debt	All debt
	Percentage of families holding debts						
All families	**40.0**	**50.1**	**40.4**	**3.2**	**7.3**	**6.7**	**73.0**
Income (1992 dollars)							
Less than 10,000	6.4	30.6	13.4	*	*	5.3	45.2
10,000–24,999	23.4	39.7	29.1	2.3	1.4	5.5	60.0
25,000–49,999	44.4	59.8	53.1	2.1	6.8	5.4	82.9
50,000–99,999	71.4	65.5	59.0	7.5	11.8	8.5	92.9
100,000 and more	76.3	50.9	40.1	6.7	33.9	15.9	89.6
Age of head (years)							
Less than 35	33.5	60.2	44.6	4.4	2.5	6.6	79.7
35–44	59.1	68.5	52.5	4.8	11.0	9.1	89.5
45–54	59.2	59.8	50.5	4.2	13.4	8.6	85.8
55–64	38.7	39.2	32.9	1.3	10.3	7.4	72.3
65–74	21.1	22.8	26.9	.7	4.4	3.1	49.5
75 and more	6.7	10.2	10.0	*	1.2	1.9	21.9
Race or ethnicity of head							
White non-Hispanic	43.8	50.5	42.5	3.2	8.1	7.2	74.5
Nonwhite or Hispanic	28.5	48.9	34.1	3.2	4.7	5.2	68.5
Current work status of head							
Professional, managerial	63.5	64.8	59.1	4.8	14.3	10.2	93.8
Technical, sales, clerical	48.5	65.1	58.5	6.7	4.6	6.2	89.1
Precision production	56.1	66.9	61.2	2.6	6.7	7.9	90.5
Operators and laborers	36.9	59.4	42.2	3.8	4.3	9.0	81.9
Service occupations	29.4	45.9	38.6	*	3.2	*	66.7
Self-employed	53.4	56.3	34.6	5.2	16.9	9.9	82.7
Retired	17.1	22.9	17.8	.3	3.4	3.3	40.9
Other not working	19.3	40.4	20.7	*	2.5	5.4	59.1
Housing status							
Owner	62.7	52.1	44.9	2.9	9.5	7.0	79.1
Renter or other	.0	46.8	32.6	3.9	3.3	6.3	62.2
	Median value of holdings for families holding such debts (thousands of 1992 dollars)						
All families	**38.0**	**5.9**	**1.1**	**2.2**	**35.7**	**2.2**	**17.6**
Income (1992 dollars)							
Less than 10,000	7.3	1.4	.3	*	*	.6	1.5
10,000–24,999	14.6	3.5	.7	1.0	14.9	1.1	5.6
25,000–49,999	32.4	7.3	1.0	2.2	16.8	1.3	18.3
50,000–99,999	49.2	8.7	1.7	2.8	34.6	3.6	49.3
100,000 and more	83.8	11.6	2.2	11.2	76.0	5.6	118.4
Age of head (years)							
Less than 35	51.4	5.5	1.1	1.6	22.3	1.8	12.7
35–44	46.4	7.7	1.3	3.7	42.5	1.3	37.4
45–54	29.0	7.8	1.1	1.5	22.3	3.4	26.5
55–64	23.5	4.2	1.1	2.2	36.3	3.4	12.1
65–74	10.1	3.8	.6	2.2	16.8	2.2	5.6
75 and more	4.5	3.4	.2	*	20.1	5.6	2.4
Race or ethnicity of head							
White non-Hispanic	39.4	6.7	1.1	3.1	35.4	2.2	22.1
Nonwhite or Hispanic	31.0	3.4	1.0	1.6	38.0	1.1	8.0
Current work status of head							
Professional, managerial	53.6	8.4	1.7	2.8	39.1	2.6	46.7
Technical, sales, clerical	34.6	4.9	1.0	1.3	51.9	2.2	13.0
Precision production	39.1	6.3	1.1	4.5	16.5	1.8	27.3
Operators and laborers	27.5	5.4	.8	1.1	14.9	1.1	12.3
Service occupations	46.9	4.9	1.2	*	6.1	*	8.9
Self-employed	46.9	8.9	1.2	10.9	70.4	5.6	39.1
Retired	11.2	3.9	.6	.4	15.6	1.3	5.4
Other not working	14.5	2.2	.7	*	22.3	.3	3.4
Housing status							
Owner	38.0	7.7	1.1	3.4	35.7	3.0	37.5
Renter or other	*	3.6	.9	1.6	30.7	.9	3.5

Note. * Fewer than five observations.

10.—Continued

B. 1992 Survey of Consumer Finances

Family characteristic	Mortgage and home equity	Installment	Credit card	Other lines of credit	Investment real estate	Other debt	All debts
	Percentage of families holding debts						
All families	**38.7**	**45.8**	**43.4**	**2.5**	**8.3**	**8.7**	**73.3**
Income (1992 dollars)							
Less than 10,000	9.6	29.8	23.7	*	.6	5.2	47.5
10,000–24,999	21.8	46.8	43.2	1.5	3.5	6.4	69.5
25,000–49,999	47.4	54.6	54.8	2.9	7.3	10.7	82.5
50,000–99,999	66.1	50.2	49.0	4.3	13.5	10.1	84.6
100,000 and more	67.6	35.3	32.9	4.2	34.6	14.9	85.0
Age of head (years)							
Less than 35	30.6	62.1	52.6	2.9	4.8	6.5	82.1
35–44	55.5	58.2	50.3	3.3	9.3	12.6	86.5
45–54	61.8	48.6	48.4	2.8	14.5	10.3	85.8
55–64	40.0	38.0	36.7	2.3	13.8	10.8	69.2
65–74	18.3	22.9	30.2	1.1	5.4	5.4	51.9
75 and more	6.7	8.0	19.5	*	.7	4.5	30.2
Race or ethnicity of head							
White non-Hispanic	41.8	45.9	43.8	2.8	9.4	8.4	74.2
Nonwhite or Hispanic	27.9	45.4	41.9	1.4	4.3	9.9	70.2
Current work status of head							
Professional, managerial	55.3	56.7	50.0	4.6	12.7	12.7	87.6
Technical, sales, clerical	50.1	57.6	58.3	2.8	7.1	7.6	88.9
Precision production	49.0	62.4	53.2	2.3	9.0	9.5	86.1
Operators and laborers	42.8	58.3	54.6	2.6	6.8	11.2	79.6
Service occupations	29.0	56.6	46.3	3.0	*	6.3	78.4
Self-employed	57.7	45.9	47.2	3.6	20.5	12.1	84.8
Retired	16.3	21.1	24.9	.6	4.1	5.2	45.0
Other not working	19.7	42.1	30.4	*	2.9	6.5	65.0
Housing status							
Owner	60.7	44.0	45.7	2.1	10.5	9.5	78.1
Renter or other	.0	49.0	39.2	3.1	4.3	7.4	64.9
	Median value of holdings for families holding such debts (thousands of 1992 dollars)						
All families	**44.0**	**4.5**	**1.0**	**2.2**	**28.0**	**2.5**	**17.6**
Income (1992 dollars)							
Less than 10,000	16.0	1.6	.6	*	6.5	.7	2.0
10,000–24,999	17.4	2.7	.8	3.0	6.1	1.0	5.6
25,000–49,999	40.0	5.6	1.3	1.5	18.0	2.0	21.1
50,000–99,999	58.0	7.8	1.5	2.0	41.0	3.0	57.2
100,000 and more	103.0	10.8	3.9	18.0	75.0	6.0	131.0
Age of head (years)							
Less than 35	52.0	4.6	.9	1.6	18.0	1.2	10.2
35–44	54.0	5.0	1.3	1.8	28.0	3.0	33.3
45–54	42.0	5.0	1.7	5.0	49.5	3.0	30.9
55–64	28.0	3.9	1.0	4.0	34.7	3.0	20.8
65–74	17.0	4.2	.7	4.0	17.0	2.0	5.6
75 and more	15.0	3.1	.6	*	104.0	1.1	2.3
Race or ethnicity of head							
White non-Hispanic	45.0	5.0	1.0	2.0	29.0	2.9	21.1
Nonwhite or Hispanic	30.3	3.2	1.0	2.5	27.0	1.6	7.6
Current work status of head							
Professional, managerial	60.0	5.9	1.4	3.0	36.0	3.0	38.0
Technical, sales, clerical	46.0	5.1	1.0	1.2	15.0	2.0	20.8
Precision production	45.0	4.2	1.0	1.3	17.0	2.2	20.6
Operators and laborers	29.0	4.5	1.0	1.0	9.0	2.5	14.9
Service occupations	31.0	3.0	.8	2.0	*	1.5	7.0
Self-employed	72.0	6.7	1.6	4.0	82.0	5.0	57.3
Retired	17.0	3.1	.8	4.0	18.0	2.0	5.2
Other not working	27.0	2.6	.8	*	27.0	1.5	4.0
Housing status							
Owner	44.0	5.6	1.1	4.0	33.4	3.0	38.0
Renter or other	*	3.5	.9	1.2	18.0	1.0	3.7

Note. * Fewer than five observations.

cards, travel and entertainment cards (such as American Express and Diners Club), and other credit cards—rose from 69.9 percent in 1989 to 72.7 percent in 1992, with increases occurring in most demographic groups. This growth is almost entirely due to a surge in the share of families with bank-type credit cards. The proportion of card holders who reported that they normally pay off their bills in full each month increased somewhat from 50.4 percent to 52.3 percent.[18] Nonetheless, use of credit cards for borrowing increased substantially over this period, largely because of the rise in the number of card holders. In 1989, 40.4 percent of families had outstanding balances on credit cards, compared with 43.4 percent in 1992, though the median balance declined very slightly. One notable change was the increase in the use of cards by families with heads aged 55 and older. The rise in the use of credit cards was particularly large for the 75-and-over group, which had a simultaneous rise in the median balance. This change is surprising in light of earlier data showing consistently low levels of debt for this group. Credit card borrowing by higher-income families fell off, but median balances rose strongly for borrowers with incomes of $100,000 or more.

Other Borrowing

Overall, families decreased their use of lines of credit other than credit cards or home equity lines between 1989 and 1992. Over this time, the percentage of families with balances on credit lines fell from 3.2 percent to 2.5 percent. Declines in use were particularly large for higher-income families, though median balances rose sharply for households with $100,000 or more of income. Increases in use were notable only for families headed by persons aged 55 and older, a group with a particularly large increase in median balances as well.

Consistent with the moderate increase in families' holdings of investment real estate, the proportion of families having loans for such properties rose 1 percentage point. Changes in use over various demographic groups were mixed and generally small. The median amount owed on these loans fell 21.6 percent, but the change was unevenly spread over demographic groups. A substantial decline in median loan balances for families with heads between 35 and 44 years of age was partially offset by gains in the 45-to-54 group.

The prevalence of other borrowing—including loans on insurance policies, loans against pension accounts, and other unclassified loans—rose over the period. Loans against pension accounts grew as a share of other borrowing over the three-year period, from 8.2 percent in 1989 to 13.1 percent in 1992. At the beginning of this period, 0.8 percent of families had loans outstanding against pension accounts and the median balance was $3,350; three years later, the proportion with such loans had risen to 1.8 percent of families, but the median balance had dropped to $1,000.

18. The share of card holders paying off their monthly balance refers only to store credit cards and to bank cards. The figures reported in the table refer to all types of credit cards.

Reasons for Borrowing

The SCF provides detailed information on the reasons families report for having taken out most loans.[19] Not unexpectedly, borrowing for home purchase—which includes first mortgages and all other loans reportedly used for home purchase—accounted for the largest share of families' debt outstanding, rising from 53.1 percent of all loan balances in 1989 to 58.6 percent in 1992 (table 11).

19. In addition to first mortgages, the survey does not ask about purposes for loans against pension accounts, credit cards, loans against insurance policies, and miscellaneous loans. Credit cards are assumed to have been used for the purchase of goods and services.

11. Distribution of amount of debt of all families, by purpose of debt, 1989 and 1992

Percent

Purpose of debt	1989	1992
Home purchase	53.1	58.6
Home improvement	2.0	1.9
Investment, excluding real estate	2.6	1.4
Vehicles	8.6	5.7
Goods and services	4.8	4.9
Investment real estate	25.8	22.4
Education	1.9	2.1
Unclassifiable loans against pension accounts	.1	.2
Other unclassifiable loans	1.1	2.7
Total	100	100

The shares of loans taken out for vehicle purchases and for investment declined markedly. Borrowing for real estate investment other than for primary residences also fell sharply. Despite the growth in employer-sponsored pension accounts noted earlier, the share of borrowing attributable to loans against such accounts rose only a bit. The share of borrowing for other goods and services was unchanged.

Choice of Lenders

Important changes occurred between 1989 and 1992 in the institutions from which consumers borrowed. Reflecting large numbers of failures of savings and loans, these institutions' share of total lending declined markedly, from 23.5 percent in 1989 to 18.9 percent in 1992 (table 12). Although other insured depositories—namely commercial banks, savings banks, and credit unions—absorbed some of this share, on balance the market share of all insured depositories fell slightly from 56.4 percent of lending to families in 1989 to 54.7 percent in 1992. Offsetting this decline was a notable increase in the share of loans made by finance companies. The shares of real estate lenders—mainly mortgage companies—brokerages, and credit card companies rose marginally.

Debt Burden

While total family borrowing was little changed over the 1989–92 period, typical interest rates on loans declined, tending to lower payments on loans. However, real family income also fell over the period. Thus, it is not clear a priori what the net effect of the interest rate and income changes was on families' ability to meet loan payments.

The survey data provide mixed evidence on the change in debt burden (table 13). On the one hand, the ratio of aggregate payments to total family income—the conventional measure of debt burden—moved down from 16.5 percent in 1989 to 15.1 percent in 1992, and the ratio computed using only the payments and incomes of families with debts also declined.[20] On the other hand, the median ratio for families with debts increased marginally.[21] Thus, the improvement in the aggregate ratio does not appear to reflect a decline in the debt burden of the typical family with debt. Rather, the decline in the aggregate ratio is attributable largely to families with incomes of $50,000 or more. Nevertheless, even for borrowers with incomes at such levels, the median ratio moved up slightly.

Another potential indicator of financial stress is the proportion of families with negative net worth, a figure that declined from 7.4 percent in 1989 to

20. Unlike analyses in previous *Bulletin* articles, we include payments for all types of debt, not just installment debt. This change is intended to allow for the shift toward home-equity-based borrowing.

21. For families with mortgage debt, the median ratio moved up from 21.4 percent to 22.9 percent between 1989 and 1992.

12. Distribution of amount of debt of all families, by type of lending institution, 1989 and 1992
Percent

Type of institution	1989	1992
Commercial bank	29.7	31.8
Savings and loan	23.5	18.9
Credit union	3.2	4.0
Finance or loan company	9.4	12.9
Brokerage	3.0	3.9
Real estate lender	13.2	13.4
Individual lender	6.8	4.0
Other nonfinancial	1.9	2.5
Government	2.1	1.2
Credit and store cards	2.3	2.9
Loans against pension accounts	.1	.2
Other unclassifiable loans	4.8	4.3
Total	100	100

13. Ratio of family debt payments to family income, by selected characteristics of families, 1989 and 1992
Percent

Family characteristic	1989		1992	
	Aggregate	Median	Aggregate	Median
All families	**16.5**	**15.1**	**15.1**	**15.4**
Income (1992 dollars)				
Less than 10,000	15.2	13.4	16.0	11.6
10,000–24,999	13.0	15.1	14.7	14.8
25,000–49,999	16.8	15.6	19.7	16.7
50,000–99,999	17.7	15.8	15.9	16.2
100,000 and more	16.5	12.6	11.8	13.7
Age of head (years)				
Less than 35	18.9	15.0	17.4	15.2
35–44	18.9	17.4	17.1	18.1
45–54	18.1	16.4	17.6	16.5
55–64	17.2	12.4	13.7	14.2
65–74	7.1	11.6	8.7	9.7
75 and more	2.6	8.5	3.6	2.6

7.1 percent in 1992. For the great majority of these families, the absolute level of negative net worth was fairly small, with median values of $2,400 in 1989 and $3,100 in 1992. In 1992, less than 0.5 percent of families had negative net worth of more than $25,000. For most families with negative net worth, their borrowing primarily consisted of education loans, credit card balances, and installment loans. Only a few families with negative net worth had large loans associated with businesses or properties.

SUMMARY

The most recent SCF provides detailed information on the finances of U.S. families over the period from 1989 to 1992. Real family income declined, largely reflecting the effects of recession as well as slow longer-term growth. Overall, families increased the share of financial assets in their portfolios, and among their financial assets, mutual funds appear to have displaced to some degree the importance of both deposits and directly held stocks and bonds. Retirement assets also became more commonly held and grew as a share of financial assets. Although debt fell slightly as a share of assets, the number of borrowers held steady. Some distributional shifts in holdings of debt occurred, but the median of the ratio of loan payments to income, a traditional measure of debt burden, was nearly unchanged among families with debts.

TECHNICAL APPENDIX

The questionnaires for the 1989 and 1992 SCF differ in only minor ways. In both years the survey gathered detailed information on the assets and liabilities of families as well as information on pension rights, employment history, marital history, other demographic characteristics, and attitudinal data.

The survey is intended to provide an adequate descriptive basis for the analysis of responses to core questions bearing on family assets and liabilities. To provide adequate coverage of the population for this purpose, the survey sample must represent both variables that are broadly distributed in the population, such as home ownership, as well as variables that are more narrow in their incidence, such as the holding of corporate bonds. To this end, the SCF employs a dual-frame sample. One part is a standard multistage area-probability sample, which provides good coverage of the widely held assets and liabilities. Because ownership of the more narrowly distributed variables is highly correlated with wealth, the second part of the SCF sample is a list design intended to oversample households that are more likely to be wealthy. The data used to design this second part of the sample derive from tax records, which are made available under strict rules governing confidentiality, the rights of the potential respondents to refuse participation in the survey, and the type of information that can be made generally available. Of the 3,143 completed cases in the cross-sectional part of the 1989 survey, 2,277 families were a part of the area-probability sample, and the remaining 866 were part of the list sample; the comparable figures for the 3,906 completed cases in the 1992 survey are 2,456 families from the area-probability sample and 1,450 from the list sample.[22]

The Survey Research Center of the University of Michigan collected the data for the 1989 survey between the months of August 1989 and March 1990. The National Opinion Research Center at the University of Chicago conducted the 1992 SCF between the months of June and November 1992. In both years, field interviewers performed most of the interviews in person, though about 10 percent were completed by telephone. In 1989, the response rate for the area-probability sample was slightly less than 70 percent, and the rate for the list sample was about 34 percent. For one stratum within the list sample that was likely to be very wealthy, the rate was about 10 percent. Response rates were slightly higher in 1992. Analysis of the data suggests that nonresponse is highly correlated with wealth. By the standards of other surveys, the response rates for the list sample are low, and were

22. The 1989 SCF also includes a longitudinal component. For a detailed description of the design of the sample for that survey, see Steven G. Heeringa, Judith H. Connor, and R. Louise Woodburn, "The 1989 Surveys of Consumer Finances Sample Design and Weighting Documentation," Working Paper (Institute for Social Research, Ann Arbor, Michigan, April 1994). The 1989 SCF represents 93.1 million families, and the 1992 survey represents 95.9 million families.

it not possible to make adjustments, the resulting data might be questionable. However, it is worth noting that differential nonresponse by wealthy families is very likely latent in all household surveys, though most surveys do not have a means of identifying this bias. In the construction of weights for the SCF, extensive analysis is conducted to devise systematic nonresponse corrections, and some external information is used to align the distribution of key characteristics in the survey to population totals, such as the geographic distribution of families.[23]

The processing of the data for this article included extensive graphical analysis to inspect the data for observations that would tend to have an overly influential effect on the estimates reported. As a result of this inspection, further adjustments were made to the weights of a small number of observations. Thus, even though it is not yet feasible to compute statistical confidence intervals for the results reported in this article, the key findings are likely to be robust.

Errors may be introduced into survey results at many stages. Sampling error, that is, expected variability in estimates, is present in any survey that is not a census. The standard error of estimates due to sampling may be reduced by increasing the size of the sample or by designing the sample to reduce variability, as is done in the SCF. Interviewers may also introduce errors, though SCF interviewers are given extensive project-specific training to minimize this problem. Respondents may introduce error by understanding a question in a different sense than that intended by the survey designers. For the SCF, extensive pretesting of questions tends to reduce the seriousness of this source of error. Also, editing routines have been developed to identify possible reporting and recording errors for further analysis. Nonresponse—either complete nonresponse to a survey or nonresponse to selected items within a survey—may be another important source of error. As noted previously, the SCF uses weighting adjustments to compensate for complete nonresponse. To deal with missing information on individual items, the SCF uses statistical methods to impute missing data.[24]

Generally, the survey data correspond well to external estimates, when such information is available. Because of the special design of the SCF sample, in general only medians from the SCF can be compared with those of other surveys. Recent comparisons of SCF data with aggregate figures on household balance sheets from the Federal Reserve flow of funds accounts suggest that when proper adjustments are made to achieve conceptual compatibility, these aggregate estimates and the SCF estimates for 1989 and 1992 are very close.[25]

The definition of ''family'' that is 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 pair of individuals (who may be married or living as partners) and all other individuals who are financially dependent on that person or those persons. In other government studies, for example, those of the Bureau of the Census, a single individual is not considered a family. As noted earlier, the Census definition of household is closer to the SCF definition of family. The term ''head'' used in this article is an artifact of the organization of the data and implies no judgment about the structure of families. In this report, the head is taken to be either the central person in a PEU, or the male in the core couple of the PEU, or the older person in a same-sex couple.

In the report on the 1989 SCF in the January 1992 *Federal Reserve Bulletin*, an error was made in the definition of the race or ethnicity classification used in several tables. The groups were labeled ''non-Hispanic whites'' and ''nonwhites and

23. For a description of the weighting design for the SCF, see Arthur B. Kennickell and R. Louise Woodburn, ''Estimation of Household Net Worth Using Model-Based and Design-Based Weights: Evidence from the 1989 Survey of Consumer Finances'' (1993); and Arthur B. Kennickell, Douglas A. McManus, and R. Louise Woodburn, ''Weight Design for the 1992 Survey of Consumer Finances'' (1994), Working Papers (Board of Governors of the Federal Reserve System, Division of Research and Statistics).

24. For a description of the imputation procedures used in the SCF, see Arthur B. Kennickell, ''Imputation of the 1989 Survey of Consumer Finances: Stochastic Relaxation and Multiple Imputation,'' Working Paper (Board of Governors of the Federal Reserve System, Division of Research and Statistics, 1991).

25. For the details of this comparison, see Rochelle Antoniewicz, ''A Comparison of the Household Sector from the Flow of Funds Accounts and the Survey of Consumer Finances,'' Working Paper (Board of Governors of the Federal Reserve System, Division of Research and Statistics, 1994).

Hispanics.'' In fact, owing to a coding error for the 1989 data, the latter group comprised only black families, and the former group comprised all other families. The 1983 data were correct as reported.

The data used here from the 1989 SCF derive from the final version of the dataset and for this reason may differ in some details from preliminary versions of the data reported earlier. The 1992 data represent the best estimates available at the current advanced stage of data processing. These preliminary data, in a form designed to protect the privacy of the respondents, should be available to the public after October 1994 from the National Technical Information Service, Federal Computer Products Center, 5285 Port Royal Road, Springfield, VA 22161 or (703) 487-4763.