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Working Paper

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Working Paper, No. 393

Provided in Cooperation with:

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Suggested Citation: Kennickell, Arthur B. (2003) : A rolling tide: changes in the distribution of wealth in the US, 1989 - 2001, Working Paper, No. 393, Levy Economics Institute of Bard College, Annandale-on-Hudson, NY

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Working Paper No. 393

A Rolling Tide: Changes in the Distribution of Wealth in the U.S., 1989-2001

by
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November 2003

This paper was presented at the Levy Institute
Conference on "International Perspectives on
Household Wealth," October 17-18, 2003

The views presented in this paper are those of the author alone and do not necessarily reflect the views of the Board of Governors of the Federal Reserve System or its staff. The author wishes to thank Ryan Bledsoe and Brooke Wells for assistance with this paper, staff at NORC for collecting the data, and the SCF respondents for generously sharing their information for research purposes. Thanks to Myron Kwast and Kevin Moore for comments. The author bears sole responsibility for any errors.

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This paper examines changes in the distribution of the wealth of U.S. families over the years from 1989 to 2001, a period when economic conditions moved from a cyclical high point to recession and recovery, through a long expansion, and finally to the beginning of another recession.¹ Over this time, a variety of factors—technical progress, changes in tastes and expectations, shifts in international trade, etc.—often dramatically altered the relative returns on assets and, thus, the value of those assets. Of particular note, advances in information technology, and especially the widespread implementation of such technology, deeply affected the way that work was done as well as the way people acquired and shared information. Although there is the strong ex post appearance of a bubble in asset prices that began to deflate in 2001, particularly in technology-related stocks, household wealth at the end 2001, as measured in the flow of funds accounts of the Federal Reserve, stood at more than twice the level in 1989—and in inflation-adjusted terms, it was almost 50 percent higher.

There is a perception, which is sustained by data (see, e.g., Petska, Strudler, and Petska [2002]), that income inequality increased over this time. There were frequent reports of vast increases in wealth, especially in the case of “Internet millionaires,” and some reports later in the period about the decline of some of those fortunes. Although growth in ownership of corporate equities exposed increasingly many families to the fluctuations of that market, for most families a principal residence or a vehicle remained the most important asset by far. Thus, what happened away from the more publicized part of the wealth spectrum is harder to guess a priori.

Unlike the case of income, where at least two good high-frequency sources of data are available on a regular basis—IRS data from individual tax returns, and data from the March supplement to the Current Population Survey—data on wealth are much more limited. This article uses data from the triennial Survey of Consumer Finances (SCF) along with information from *Forbes* to describe changes in the distribution of wealth.

The first section of the paper examines the changes at the very highest level of wealth, using *Forbes* data; in addition to a review of the cross-section patterns in the data, this section also looks at some dynamics. The next section uses SCF data, which explicitly exclude the

1. In this paper, the terms “net worth” and “wealth” are used interchangeably to refer to assets net of liabilities.

Forbes group, to characterize shifts for the rest of the population. The next three sections look in detail at subgroups of the population: families with negative wealth, the age cohort that was aged 46 to 55 in 2001, and African Americans families. A summary ends the paper.

I. ESTIMATES OF WEALTH USING *FORBES* DATA

Every year since 1982, *Forbes* has published information on what staff of that magazine estimate to be the wealthiest 400 people in the U.S.² Being personally identified, the “*Forbes* 400” are obviously more salient than the great mass of other people who are less wealthy. Consequently, changes in the wealth of the *Forbes* group are likely to have a disproportionately large influence on popular perceptions of changes in the distribution of wealth overall.

The *Forbes* data show strong growth in real terms across a variety of dimensions from 1989 to 2001, but there are some striking differences within the period and across different groups (table 1).³ From 1989 to 1995, overall mean wealth of the group was fairly flat, as was the level of wealth at most of the ranks of the distribution of this population up to around the top 50. The top 50 showed substantial growth in wealth over this period. From 1995 to 1999, the whole distribution shifted up, but it shifted most strongly at the top. The highest value rose 428

2. See Canterbury and Nosari [1985] and the October 2001 issue of *Forbes*. It is not known publicly just how broad the wealth definition used by *Forbes* is. Although it seems likely that the measure does not include some common items, e.g. automobiles and checking accounts, it does seem likely that the value of such omitted items are a very small fraction of the items that are included.

According to the magazine, their estimates are “highly educated guesses” based on a variety of sources. The input data include both information that may be provided by the individuals, which is reviewed for plausibility, and publicly available data. The latter type of information may take the form of registered ownership in publicly traded corporations, records of sales of privately held firms and property, and similar types of information. Some assets—notably trusts—are very difficult to value, and mis-estimation of such assets may introduce error. Often distinctions must be made about the “true” owner of assets that have a complex distribution over members of a family, and this process may also introduce error. As a check, the *Forbes* estimates are reviewed by a panel of outside experts in a number of financial and business areas. Unfortunately, it is impossible to judge the consistency of the *Forbes* methodology over time on the basis of the limited documentation available.

3. All dollar figures reported in this paper were adjusted to 2001 dollar terms using the “current methods” price index series developed by the Bureau of Labor Statistics. To the degree that it is possible to do so, this index extrapolates backwards the methodological improvements that have been made to the official Consumer Price Index.

Table 1: The wealthiest 400 people in the U.S. according to *Forbes*: wealth by rank and average wealth in millions of 2001 dollars; 1989-2002.

	Year							
	1989	1992	1995	1998	1999	2000	2001	2002
Wealth by <i>Forbes</i> rank								
1	7,106	7,746	17,002	63,214	89,716	64,318	54,000	42,361
10	3,417	4,303	4,940	11,907	17,943	17,356	17,500	11,723
50	1,736	1,537	2,068	3,139	4,222	4,798	3,900	3,152
100	957	984	1,034	1,840	2,533	2,654	2,000	1,773
200	615	584	689	1,028	1,267	1,531	1,200	1,084
300	478	430	500	731	897	1,000	875	763
400	376	326	391	541	660	740	600	542
Avg. wealth	921	937	1,025	1,997	2,731	3,057	2,366	2,148
<i>Memo items:</i>								
Number of billionaires	97	92	107	205	278	301	266	205

percent while the 10th value rose 265 percent; at the same time, the cut-off value for membership in the group rose 69 percent. After 1999, the top end led the way to a general downturn in 2001 that continued into 2002. Nonetheless, even at the end of the period, the entire distribution was distinctly above the levels of 1989. From 1989 to 2001, the total wealth of the *Forbes* 400 as a proportion of an estimate of total individual wealth (the wealth of the *Forbes* 400 plus the total wealth estimated by the SCF for the rest of the population) ranged from 1.5 percent in 1989 to a high of 2.5 percent in 1998 to 2.2 percent in 2001 (table 2).

Table 2: Wealth of the *Forbes* 400 as a percent of total wealth measured by the SCF plus wealth of the *Forbes* 400; 1989, 1992, 1995, and 2001.

<i>Year</i>	
1989	1.5
1992	1.7
1995	1.7
1998	2.5
2001	2.2

Underlying the overall growth in the whole distribution of the wealth of the *Forbes* group was a considerable amount of churning, although there was also substantial persistence. Of the 400 people in the 2001 list, 230 were not anywhere in the 1989 list (table 3). Over this long a period, such movement may be somewhat less surprising, but even between 1998 and 2001 nearly a quarter of the people on the list were replaced by others. Although some of the movement is explained by the transmission of wealth through inheritance, the number of such instances

appears to be small—only about 20 of the members of the 1989 list who did not appear in the 2001 list appear to be explained in this way; others may have died and fragmented their wealth into pieces smaller than the *Forbes* cut-off. Persistence of individuals in the list was highest for people who were in the lowest 100. Of the people in the top 100 of the 2001 list, 45 were included in the same group in 1989 and 23 others were in higher ranks of the list. Of the highest 100 in 1989, only 29 were still somewhere in the list for 2001. The limited information available suggests that those in the upper part of the 400 may have relatively less diversified—and thus, more volatile—holdings.

Table 3: Rank of 2001 members of the *Forbes* 400 by their ranks in 1989, 1992, 1995, and 1998.

Year/rank	2001 rank					All groups*
	Not in 2001	1-100	101-200	201-300	301-400	
<i>1989 rank</i>						
Not in 1989	0	32	66	62	70	230
1-100	34	45	5	8	8	100
101-200	55	17	10	12	6	100
201-300	70	4	8	9	9	100
301-400	71	2	11	9	7	100
All groups *	230	100	100	100	100	630
<i>1992 rank</i>						
Not in 1992	0	21	61	62	66	210
1-100	28	55	8	7	2	100
101-200	44	15	15	15	11	100
201-300	57	7	13	11	12	100
301-400	81	2	3	5	9	100
All groups *	210	100	100	100	100	610
<i>1995 rank</i>						
Not in 1995	0	12	46	44	51	153
1-100	18	67	10	3	2	100
101-200	29	12	26	23	10	100
201-300	45	7	7	20	21	100
301-400	61	2	11	10	16	100
All groups *	153	100	100	100	100	553
<i>1998 group</i>						
Not in 1998	0	4	20	31	40	95
1-100	7	81	7	5	0	100
101-200	4	13	53	28	2	100
201-300	27	1	15	26	31	100
301-400	57	1	5	10	27	100
All groups *	95	100	100	100	100	495

* The “all groups” categories include all cases in either 2001 or the classification year.

II. ESTIMATES OF WEALTH USING SCF DATA

The SCF is designed to measure wealth.⁴ The survey questions cover the household balance sheet in detail. Through use of statistical records derived from tax returns, the survey sample design allows for more efficient and less biased estimates of wealth than are generally feasible through simpler designs, such as multi-stage area-probability designs. Since 1983, the survey has been conducted on a triennial basis by the Federal Reserve Board in cooperation with the Department of the Treasury. Following a major redesign in 1989, the methodology has been largely fixed. Many wealth estimates turn critically on the measurement of the upper tail of the wealth distribution, and that measurement may be sensitive to the technical assumptions necessary to make the measurement. Thus, the analysis here is restricted to the 1989-2001 surveys.

Over the period from 1989 to 2001, the SCF data show that the distribution of wealth shifted up broadly in real terms (table 4)—another way of saying that in absolute terms there were fewer poor families and more families who were wealthier.⁵ The proportion of families with net worth less than \$250,000 declined from 79.1 percent in 1989 to 73.2 percent in 2001; the proportion of families with negative net worth fell only slightly, but the proportion in all but one of the other wealth groups in the table below \$250,000 fell. The proportion of families in

4. See Kennickell [2000a] for an overview of the methodology of the SCF and Aizcorbe *et al.* [2003] for a summary of recent data from the survey. The target population for the SCF specifically excludes individuals who are included in the *Forbes* list; it is assumed that such individuals would be so unlikely to participate in the SCF that it would not be efficient to expend effort to interview them. The wealth measure used here nets a wide variety of assets (notably including designated retirement assets) and nonfinancial assets (notably including the value of vehicles) against a broad measure of directly-held debt. One omission, a valuation of defined-benefit pension rights, may be important over the period considered here. Over this time, account-type pension arrangements that would be included in the asset measure used here grew to some degree at the expense of defined-benefit plans. For one attempt to incorporate a measure of defined-benefit wealth (and Social Security wealth) into net worth, see Kennickell and Sundén [1997].

5. Some of the SCF data used here have previously been used to look at questions of wealth distribution by Weicher [1996], Wolff [1996], and Kennickell and Woodburn [1992 and 1999], and Kennickell [2001].

all higher groups rose, and the rise was particularly striking for the group with a million dollars or more of wealth.

The survey indicates that in the period considered, roughly a third of total wealth has been held by each of the following: the highest 1 percent of the wealth distribution, the next-highest 9 percent, and the remaining 90 percent (table 5). Within the lowest 90 percent, wealth was also concentrated; the lowest 50 percent of the distribution held only about 3 percent of the total. Although the wealth distribution generally rose over the 1989 to 2001 period, simple measures of wealth concentration fail to show consistent patterns. Moreover, few changes in groups' shares are statistically significant. For example, the wealth share of the top 1 percent of the wealth distribution moved from about 30 percent in both 1989 and 1992 to about 35 percent in 1995 and it tapered down to 33 percent by 2001; none of the changes are statistically significant according to the estimation methodology used to compute standard errors for the SCF.⁶

However attractive summary measures of wealth change may be for some purposes, such measures may obscure more complicated changes. An alternative is to look more directly at the changes across the entire distribution of wealth; quantile-difference (Q-D) plots are one means of doing so.⁷ Briefly, a Q-D plot displays the difference in the level of two distributions at common percentile points; for example, the value given at the 50th percentile is the difference in the medians of two distributions.

6. Because of the complexity of the SCF sample design, it is not feasible to apply the most common procedures for variance estimation. Instead, a bootstrap procedure is used (see Kennickell [2000b]). In this approach, a large number of pseudo-samples are drawn with replacement from the full set of completed cases, and each of these replicate samples is weighted using the same apparatus applied to weight the full set of cases. The replicate selections are made in a structured but random way that is intended to reflect important sources of variation in the original sample design. In making these selections a degree of approximation is required. Close investigation of earlier versions of the replicate samples (those used in Kennickell [2001] to evaluate earlier estimates of wealth changes) revealed that the selection of those samples was introducing imbalances that would not have been allowed in an actual SCF. Although the standard errors reported in this paper are based on a revision of the methodology that attempts to correct for those imbalances, other imbalances that artificially inflate variability may remain. At the same time, there may also be important sources of variability that are understated. Nonetheless, the estimation methodology applied in this paper reflects the best information available at this time for evaluating the meaningfulness of comparisons between SCF estimates.

7. See Kennickell [2002] for a more detailed discussion of such graphs.

Figures 1a-4a show the Q-D plots of inflation-adjusted changes in the level of wealth for each of the pairs of surveys in sequence: 1992 minus 1989, 1995 minus 1992, 1998 minus 1995, and 2001 minus 1998.⁸ To integrate over all of these changes, figure 5a shows the change from 1989 to 2001. The pairs of dots clustered around the central line of the plots represent 95 percent confidence intervals for selected percentiles.

Between 1989 and 1992, wealth tended to decline by progressively larger amounts for the groups above about the 35th percentile of the wealth distribution, and wealth rose slightly for the next lowest 20 percent; the next lowest 10 percent had zero or small wealth in both periods, and the remaining lowest group had its negative net worth increase in absolute value. Change over this period reflects the effects of recession on asset values. From 1992 to 1995, the range of increases spread up to about the 75th percentile; above that point there was an alternating mixture of gains and losses. Over the succeeding three years to 1998, the data show a pattern of approximately loglinear increases in the level of wealth from about the 30th to the 95 percentile; for the group above the 95th percentile, the increase was even faster. From 1998 to 2001, the range of increase begins at about the 10th percentile, and the peak at the top is steeper; the negative net worth of the group at the very bottom of the distribution declined in absolute value. The view across the entire 1989 to 2001 period shows a general pattern similar to the 1998 to 2001 change, but the group at the very bottom on net had greater negative net worth in absolute terms.

Although there were large differences in wealth gains across the distribution, such information alone is not sufficient to characterize the shifts in the relative concentration of wealth across the distribution. For wealth shares of groups to change, their growth rates must differ. Figures 1b-5b show the wealth changes given in figures 1a-5a normalized as a percent of the level of wealth value at each percentile in the earlier year. Thus, the figures show the growth rates of wealth across the wealth distribution.

Because of the prevalence of negative and zero wealth values among the lowest quintile of the wealth distribution, that group is more difficult to characterize in terms of percentage

8. In order to display the enormous range of differences without overly compressing relative variation in some parts of the wealth distribution, the vertical axis is scaled using the inverse hyperbolic sine transformation with a scale parameter of 0.0001. Close to zero, the transformation is approximately linear; at larger absolute values, it is approximately logarithmic.

changes than groups higher in the spectrum of wealth. Within the lowest 20 percent in each of the growth rate figures, there is a region where the percentage changes are very large in absolute value or so large as to be beyond the range of the figure; because wealth is zero, or nonzero and very small in absolute value in this part of the distribution, small level changes yield percentage changes for this group far beyond the range of other groups.⁹ For the group below the interval where no values are displayed, the denominator values are negative; thus, for this group positive level changes (i.e., lower absolute values of negative net worth) correspond to negative percentage changes and *vice versa*.

Percentage declines in wealth from 1989 to 1992 are substantially more even across the top half of the distribution than the level changes. The data also show progressively larger proportional growth for the part of the group below about the 30th percentile than is discernable from the level changes. The corresponding data from 1992 to 1995 show little consistent change in the top half of the distribution other than a region of increase above the 80th percentile and a region of decrease above the 90th; as in the 1989 to 2001 data, lower points in the distribution tended to have larger percentage changes. Over the next three years to 1998, percentage increases were substantial but fairly even in the top half of the distribution, with a spike upward around the 95 percentile; the part of the group below the middle had progressively smaller changes, with the changes becoming negative at about the 30th percentile. From 1998 to 2001, the highest 80 percent of the distribution (roughly, those with wealth above zero) saw the largest percentage gains at the two ends of that group, with the lowest growth occurring around the median. Integrating over the entire 1989 to 2001 period, the data also show strongest growth at the top and bottom of the group, with fairly even growth across the middle.

9. When the denominator was actually zero, \$1 was substituted for zero as a denominator to make division possible.

Table 4: Percent distribution of families over wealth groups defined in terms of 2001 dollars; 1989, 1992, 1995, 1998, and 2001.

Net worth (2001 dollars)	Survey year				
	1989	1992	1995	1998	2001
<\$0	7.3 <i>0.6</i>	7.2 <i>0.4</i>	7.1 <i>0.4</i>	8.0 <i>0.4</i>	6.9 <i>0.3</i>
\$0-\$999	8.0 <i>0.6</i>	6.3 <i>0.4</i>	5.2 <i>0.3</i>	5.8 <i>0.4</i>	5.4 <i>0.3</i>
\$1,000-\$2,499	3.5 <i>0.4</i>	3.8 <i>0.3</i>	2.6 <i>0.2</i>	2.5 <i>0.2</i>	2.4 <i>0.2</i>
\$2,500-\$4,999	4.2 <i>0.5</i>	3.6 <i>0.3</i>	3.5 <i>0.3</i>	3.1 <i>0.3</i>	3.5 <i>0.3</i>
\$5,000-\$9,999	4.1 <i>0.4</i>	4.9 <i>0.4</i>	5.6 <i>0.4</i>	5.0 <i>0.3</i>	4.7 <i>0.3</i>
\$10,000-\$24,999	8.6 <i>0.6</i>	9.5 <i>0.4</i>	9.4 <i>0.5</i>	8.1 <i>0.5</i>	8.1 <i>0.4</i>
\$25,000-\$49,999	9.6 <i>0.5</i>	10.8 <i>0.6</i>	10.4 <i>0.6</i>	9.7 <i>0.5</i>	9.2 <i>0.5</i>
\$50,000-\$99,999	13.6 <i>0.6</i>	14.6 <i>0.5</i>	16.0 <i>0.5</i>	13.2 <i>0.6</i>	12.8 <i>0.5</i>
\$100,000-\$249,999	20.2 <i>1.0</i>	21.6 <i>0.8</i>	22.1 <i>0.7</i>	21.6 <i>0.8</i>	19.2 <i>0.6</i>
\$250,000-\$500,000	11.0 <i>0.7</i>	9.3 <i>0.6</i>	9.3 <i>0.3</i>	12.0 <i>0.7</i>	13.0 <i>0.6</i>
\$500,000-\$999,999	5.4 <i>0.5</i>	4.6 <i>0.3</i>	5.1 <i>0.2</i>	6.0 <i>0.5</i>	7.8 <i>0.6</i>
≥\$1,000,000	4.7 <i>1.2</i>	3.8 <i>0.2</i>	3.6 <i>0.2</i>	4.9 <i>0.3</i>	7.0 <i>0.4</i>
All families	100.0 <i>0.0</i>	100.0 <i>0.0</i>	100.0 <i>0.0</i>	100.0 <i>0.0</i>	100.0 <i>0.0</i>

Note: Standard errors with respect to imputation and sampling are given in italics.

Table 5: Percent of net worth held by various groups defined in terms of percentiles of the distribution of net worth; 1989, 1992, 1995, 1998, and 2001.

Year	Percentile group				
	0-49.9	50-89.9	90-94.9	95-98.9	99-100
1989	2.7 <i>0.4</i>	29.9 <i>1.8</i>	13.0 <i>1.6</i>	24.1 <i>2.3</i>	30.3 <i>2.3</i>
1992	3.3 <i>0.2</i>	29.7 <i>1.1</i>	12.6 <i>0.7</i>	24.4 <i>1.3</i>	30.2 <i>1.4</i>
1995	3.6 <i>0.2</i>	28.6 <i>0.7</i>	11.9 <i>0.6</i>	21.3 <i>0.9</i>	34.6 <i>1.3</i>
1998	3.0 <i>0.2</i>	28.4 <i>0.9</i>	11.4 <i>0.6</i>	23.3 <i>1.2</i>	33.9 <i>1.5</i>
2001	2.8 <i>0.1</i>	27.4 <i>0.7</i>	12.1 <i>0.7</i>	25.0 <i>1.1</i>	32.7 <i>1.4</i>

Figure 1a: Quantile-difference plot of wealth: 1992 wealth minus 1989 wealth; 2001 dollars.

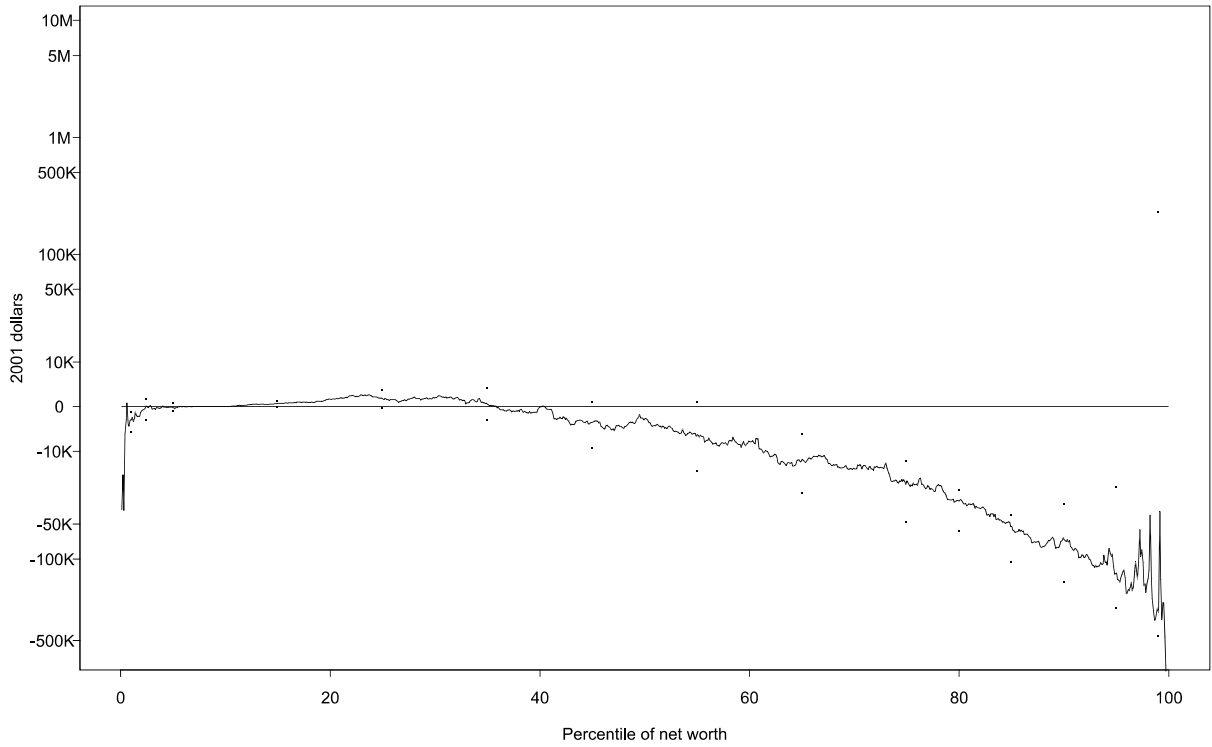


Figure 1b: Relative quantile-difference plot of wealth: 1992 wealth minus 1989 wealth as a percent of 1989 wealth, using 2001 dollars.

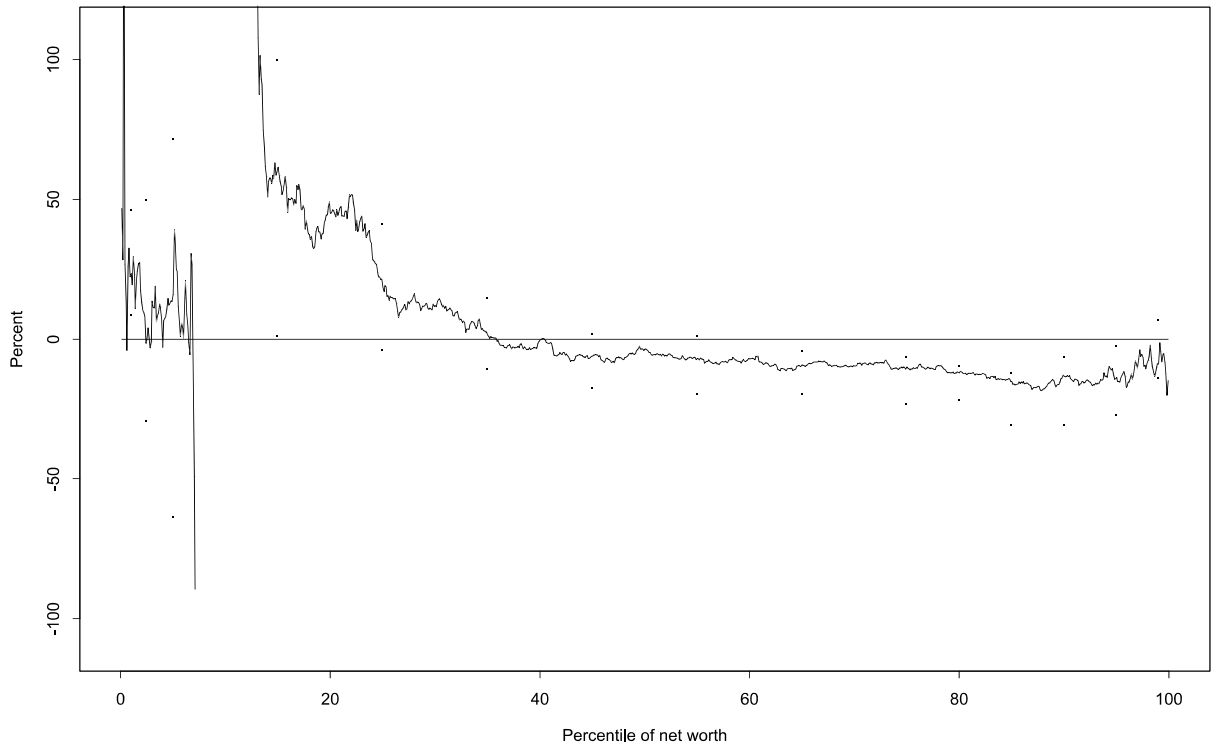


Figure 2a: Quantile difference plot of wealth: 1995 wealth minus 1992 wealth; 2001 dollars.

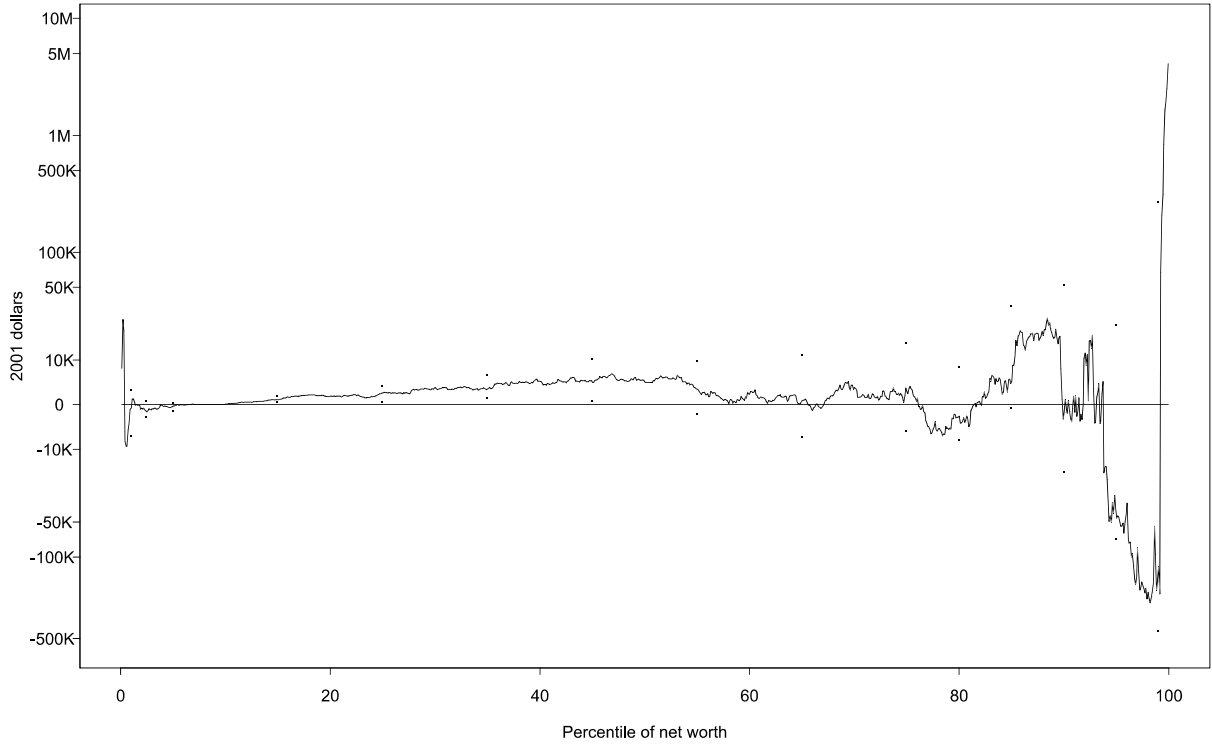


Figure 2b: Relative quantile-difference plot of wealth; 1995 wealth minus 1992 wealth as a percent of 1992 wealth, using 2001 dollars.

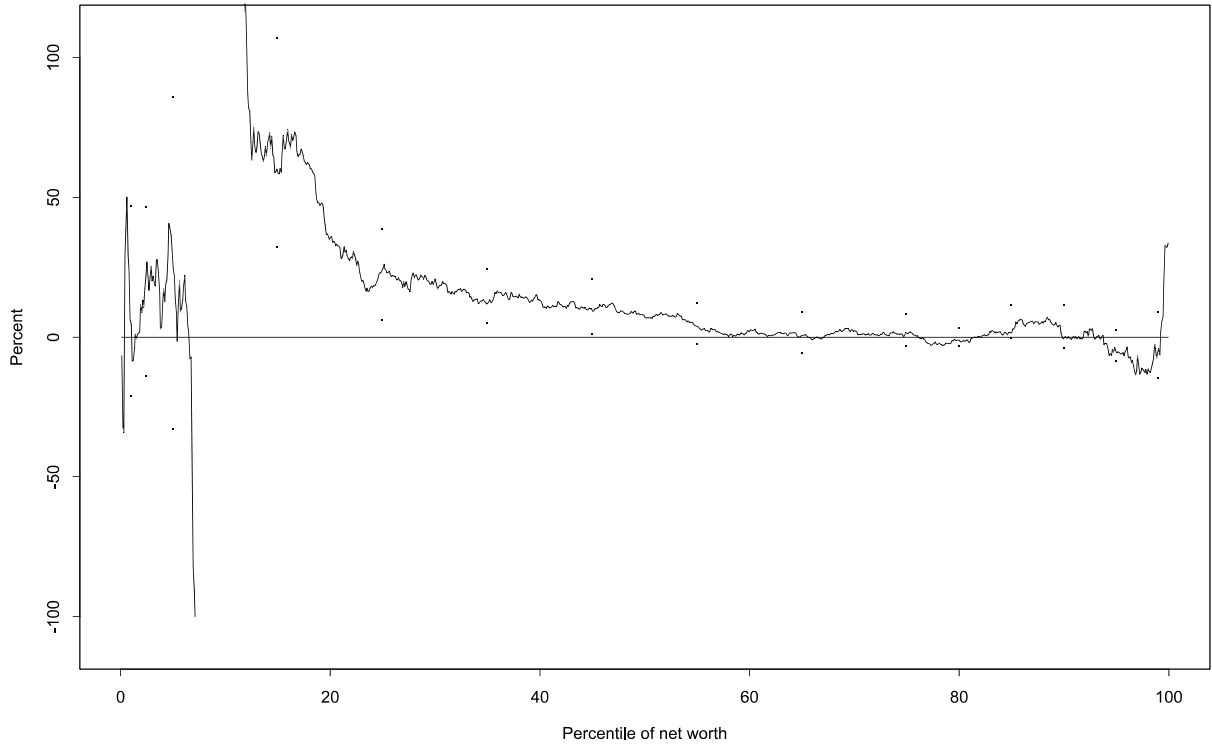


Figure 3a: Quantile-difference plot of wealth; 1998 wealth minus 1995 wealth; 2001 dollars.

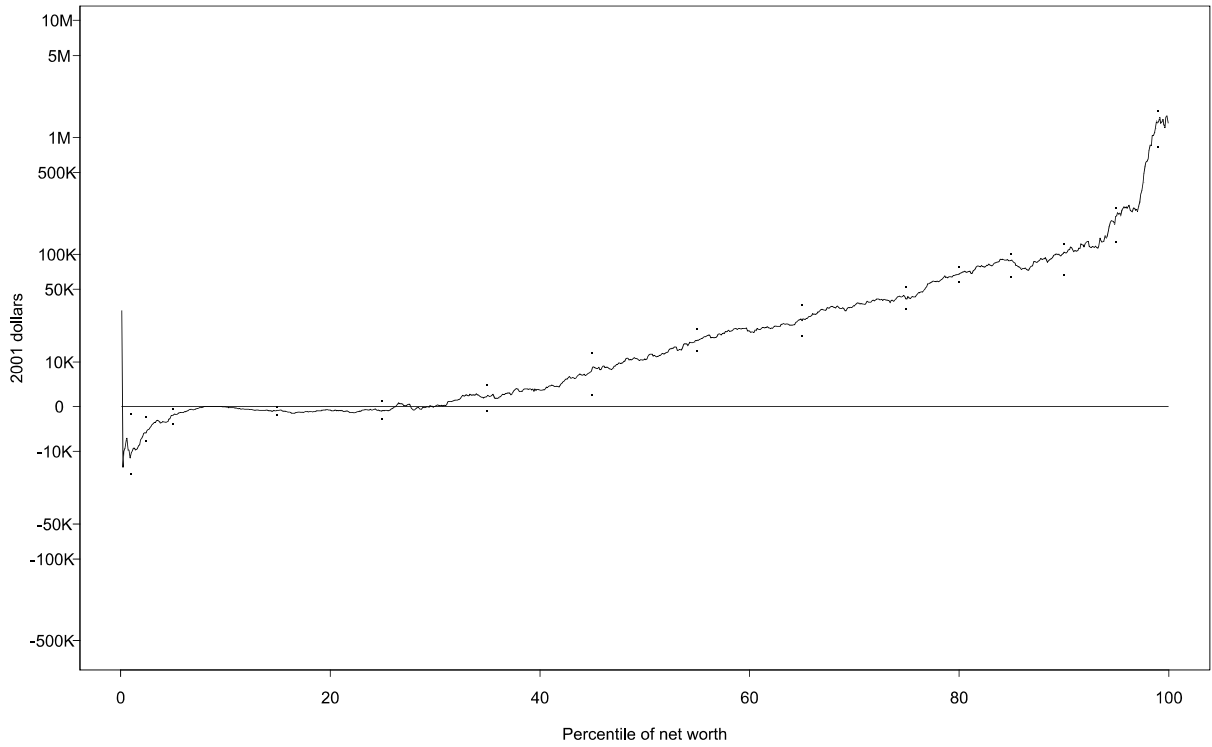


Figure 3b: Relative quantile-difference plot of wealth; 1998 wealth minus 1995 wealth as a percent of 1995 wealth, using 2001 dollars.

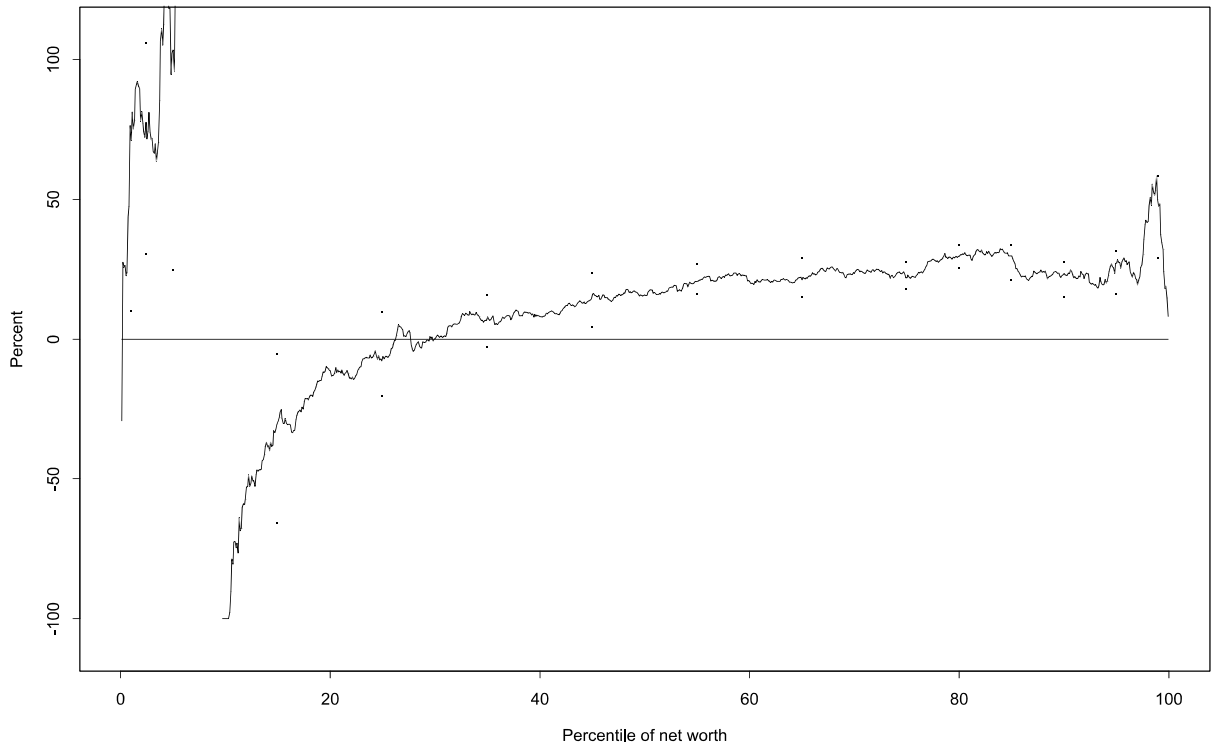


Figure 4a: Quantile-difference plot of wealth; 2001 wealth minus 1998 wealth; 2001 dollars.

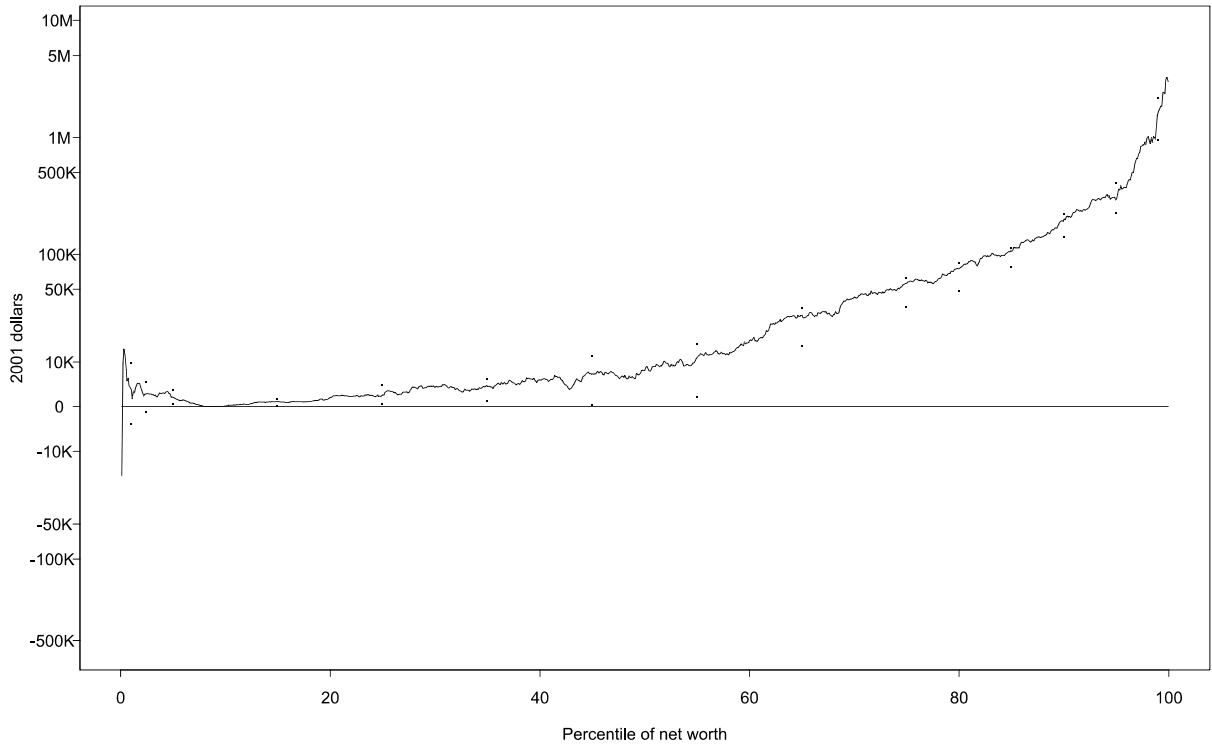


Figure 4b: Relative quantile-difference plot of wealth; 2001 wealth minus 1998 wealth as a percent of 1998 wealth, using 2001 dollars.

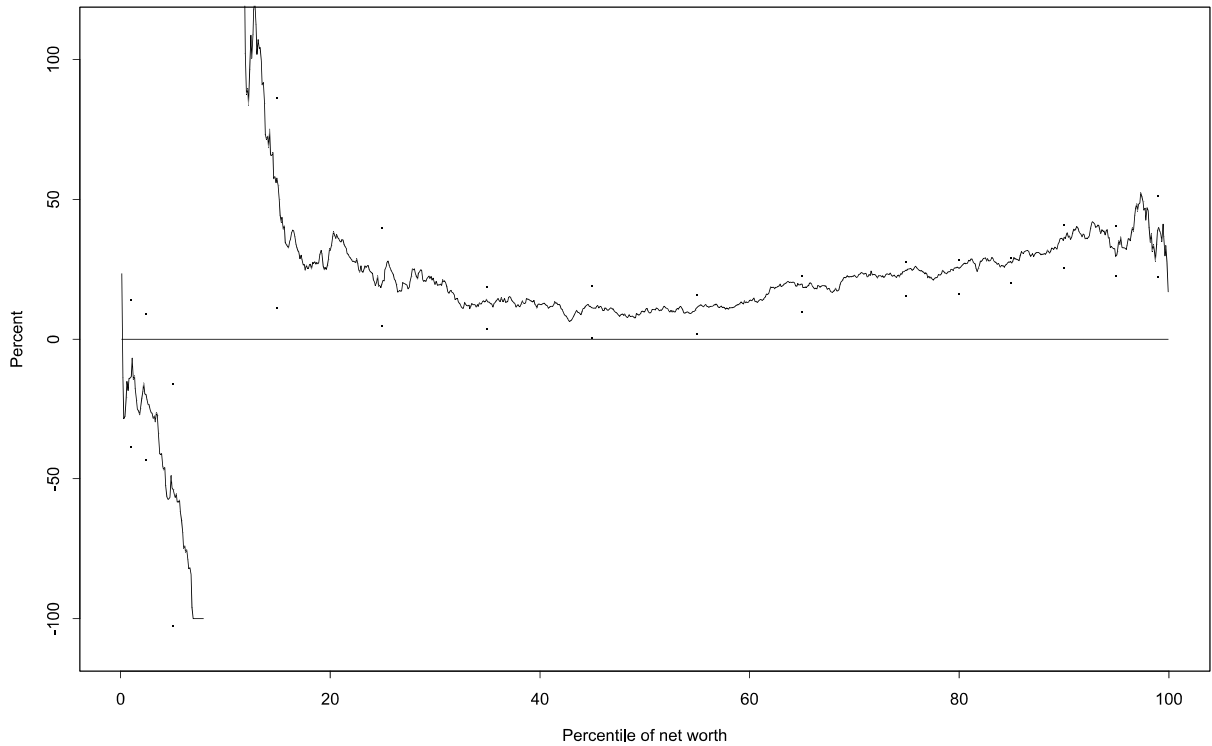


Figure 5a: Quantile difference plot of wealth; 2001 wealth minus 1989 wealth; 2001 dollars.

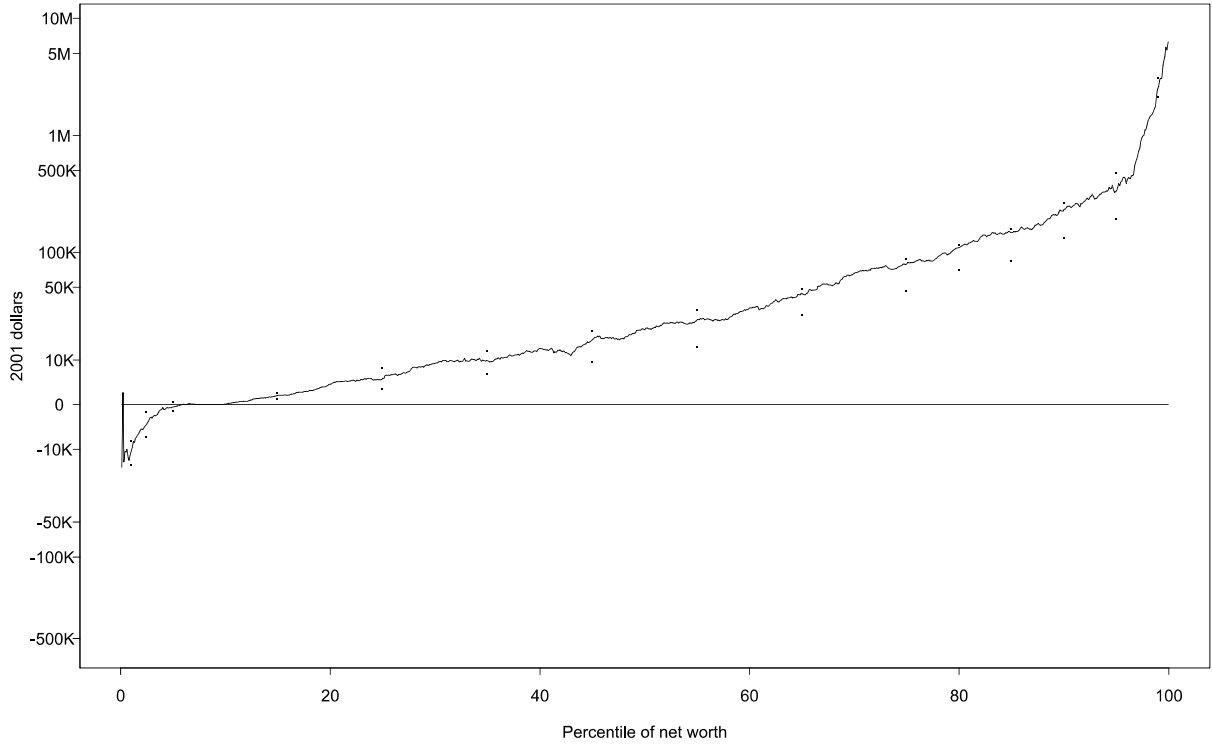
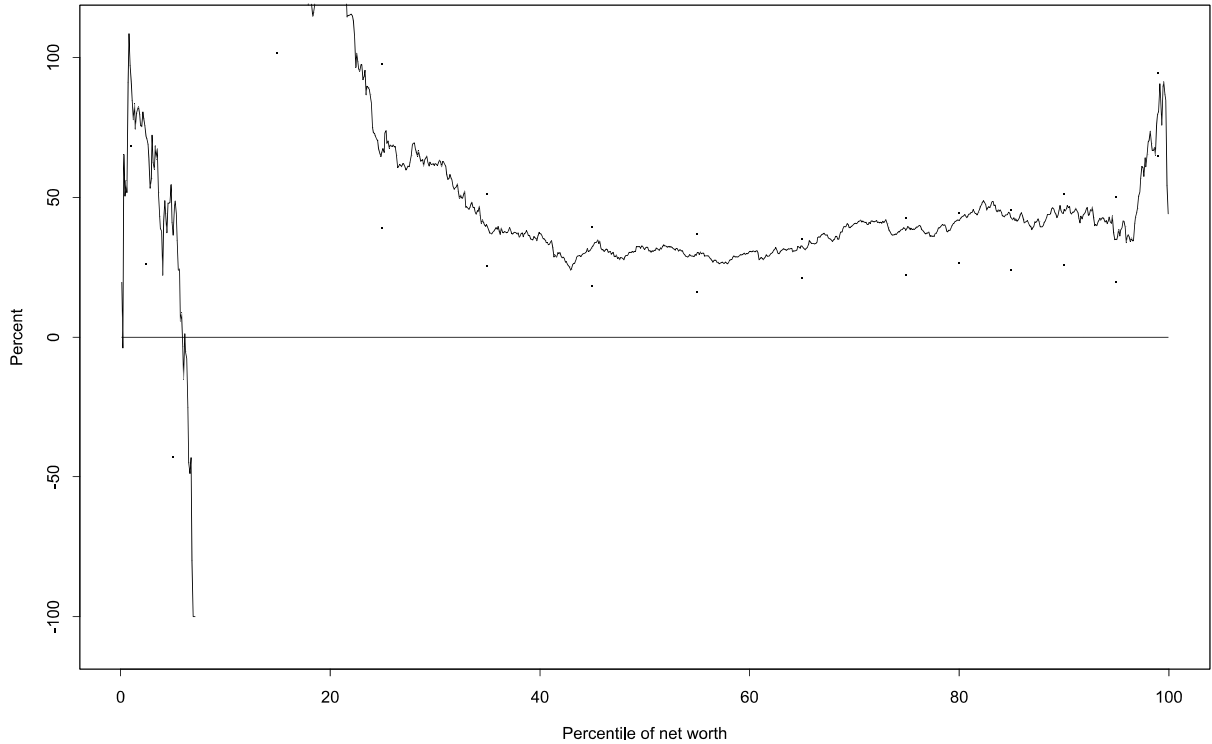


Figure 5b: Relative quantile-difference plot of wealth; 2001 wealth minus 1989 wealth as a percent of 1989 wealth using 2001 dollars.



The portfolio choices of individual families and the differential effects of variation in the market pricing of those choices underlie many of the wealth patterns seen over the 1989 to 2001 period (tables 6-10). Several stylized facts characterize portfolio holdings across the wealth distribution during this time. The highest decile of the wealth distribution holds a disproportionately large fraction of most assets and liabilities, but the share is particularly large for direct holdings of bonds, direct and indirect holdings of corporate stocks, and equity in privately held businesses and real estate investments; holdings of these assets are even more concentrated among the wealthiest 1 percent. The amount of outstanding debts and the value of vehicles, though still disproportionately concentrated in this decile, are notably less so.

For the group with net worth greater than the median but smaller than the value at the 90th percentile, no item is as concentrated as is the case for the wealthier group. However, a few items are held in about the same proportion or more than their population share: certificates of deposit, savings bonds, vehicles, principal residences, and mortgages. The group holds substantial, but smaller shares of most other items except bonds, directly held stocks, and businesses.

The remaining half of the distribution below the median holds very disproportionately small shares of all items except for outstanding balances on credit cards and installment loans. Vehicles are the only asset for which the group holds more than a quarter of the total value. The shares of principal residences and associated mortgages are not negligible, but because the level of debt is so large relative to the value of the asset, they hold much less than 10 percent of total net equity in a principal residence (HOUSES minus MRTHL in the table).

Over the time considered here, the most striking finding is how little groups' shares varied. Only three changes seem noteworthy. After remaining fairly flat until 1998, the share of both directly- and indirectly-held stock owned by the highest 10 percent of the wealth distribution declined in 2001, and the difference was captured by the next highest 40 percent of the distribution. The data also show a tendency for the share of principal residences (and, somewhat more strongly, home equity) held by the highest 10 percent of the wealth distribution to rise. Finally, the data show a strong rise from 1989 to 1992 in the share of non-mortgage debt held by the lower half of the wealth distribution, with a tendency for this share to decline in the later years.

Another way of looking at the data is to examine portfolio shares within the wealth percentile groups. The combination of business and investment real estate equity rises as a share of assets across the percentile groups; the portfolio share of the highest 1 percent of the wealth distribution was 40.0 percent in 2001, a share that had been substantially higher in earlier survey years (table 11). The proportion of assets attributable to direct and indirect stock holdings has increased markedly over time for all the percentile groups. For the group with wealth in the 50th to 90th percentiles of the wealth distribution, the portfolio share of such stocks rose from about 5.6 percent in 1989 to 17.0 percent in 2001; the share of such stocks is higher for the top of the distribution than for the lower part, but the disproportion is not as great as for business and investment real estate equity; for the highest 10 percent of the wealth distribution, the declining share of businesses over time was approximately offset by the rising share of such stocks.

The value of a principal residence accounted for about 60 percent of the assets of the lower half of the wealth distribution over the surveys considered, but it accounted for increasingly less for higher percentile groups. The asset share of vehicles fell more sharply over the wealth groups; in 2001, vehicles accounted for 17.2 percent of the assets of the lower half of the wealth distribution, but only 5.6 percent of the assets of the next highest 40 percent of the wealth distribution and less than a percent of the assets of the wealthiest 1 percent.

The most equal asset share across all the percentile groups is financial assets other than direct and indirect stock. In 2001 the share ranged from 13.0 percent for the lower half of the distribution to 21.8 percent for the group between the 90th and 95th percentiles of the wealth distribution.

Debt as a share of assets varies very widely across the wealth distribution. The lower half of the wealth distribution is by far the most leveraged; debt as a proportion of their assets was 56.2 percent over the 1989 to 2001 period. For the next highest 40 percent of the wealth distribution, the leverage rate drops to 18.8 percent. For the highest 1 percent of the wealth distribution, the ratio is under 3 percent. Across all groups, the leverage rate showed no consistent pattern across the 1989–2001 period.

Table 6: Amounts (billions of 2001 dollars) and shares of net worth and components distributed by net worth groups, 1989.

	Wealth percentile group											
	All families		0-50		50-90		90-95		95-99		99-100	
	Amount	Share	Amount	Share	Amount	Share	Amount	Share	Amount	Share	Amount	Share
NETWORTH	24,186.2	100.0	641.5	2.7	7,236.2	29.9	3,167.4	13.0	5,833.4	24.1	7,307.7	30.3
ASSET	27,615.4	100.0	1,515.2	5.5	8,948.5	32.4	3,499.5	12.6	6,160.0	22.3	7,492.2	27.2
FIN	8,522.0	100.0	340.6	4.0	2,337.1	27.4	1,162.5	13.6	2,265.3	26.5	2,416.5	28.4
LIQ	1,584.9	100.0	95.9	6.1	507.9	32.1	208.7	13.2	338.7	21.4	433.6	27.2
CDS	841.4	100.0	34.5	4.1	368.1	43.8	139.6	16.6	214.2	25.3	84.9	10.2
SAVBND	125.8	100.0	8.4	6.7	60.0	47.6	23.7	19.1	24.6	19.3	9.1	7.3
BOND	842.9	100.0	2.7	0.3	65.4	7.8	93.6	11.0	245.6	29.1	435.6	51.8
STOCKS	1,298.3	100.0	16.3	1.3	204.6	15.8	133.5	10.2	405.3	31.3	538.6	41.5
NMMF	456.8	100.0	4.2	0.9	69.5	15.3	73.9	16.2	153.6	33.6	155.7	34.1
RETQLIQ	1,807.9	100.0	107.8	6.0	683.6	37.9	271.7	15.1	478.5	26.3	266.3	14.8
CASHLI	506.4	100.0	44.6	8.8	216.5	42.8	81.0	16.0	83.0	16.4	81.3	16.0
OTHMA	628.8	100.0	2.5	0.4	84.1	13.3	73.9	11.4	179.9	29.4	288.5	45.5
OTHFIN	428.7	100.0	23.7	5.6	77.5	18.3	62.9	14.9	141.8	32.9	122.9	28.4
NFIN	19,093.5	100.0	1,174.6	6.2	6,611.5	34.7	2,337.0	12.2	3,894.7	20.4	5,075.7	26.6
VEHIC	1,056.3	100.0	270.5	25.6	513.9	48.7	100.4	9.5	110.0	10.4	61.4	5.8
HOUSES	8,682.6	100.0	859.7	9.9	4,818.7	55.5	1,113.1	12.8	1,316.7	15.2	574.4	6.6
ORESRE	1,552.0	100.0	40.4	2.6	471.3	30.4	309.9	19.9	432.4	27.9	298.0	19.3
NNRESRE	2,112.7	100.0	-43.9	-2.1	243.8	11.6	205.3	9.6	545.4	25.9	1,162.0	55.1
BUS	5,174.5	100.0	26.7	0.5	453.1	8.8	538.1	10.2	1,400.3	27.1	2,756.3	53.4
OTHNFIN	515.4	100.0	21.2	4.1	110.6	21.5	70.2	13.6	89.8	17.4	223.6	43.4
DEBT	3,429.2	100.0	873.7	25.5	1,712.4	49.9	332.1	9.7	326.5	9.5	184.5	5.4
MRTHEL	2,295.6	100.0	487.7	21.2	1,316.4	57.3	227.0	9.9	198.3	8.7	66.2	2.9
RESDBT	342.8	100.0	96.9	28.3	85.0	24.8	55.4	16.0	65.4	19.1	40.2	11.8
INSTALL	557.7	100.0	230.0	41.2	242.5	43.5	30.7	5.5	34.0	6.1	20.5	3.7
OTHLOC	61.9	100.0	4.6	7.7	6.6	10.9	7.4	11.6	5.2	8.6	38.0	61.3
CCBAL	94.0	100.0	40.2	42.8	46.1	49.0	4.8	5.0	2.6	2.8	0.3	0.3
ODEBT	77.3	100.0	14.3	18.6	15.8	20.4	6.9	8.6	21.0	27.5	19.3	25.0
Memo items:												
EQUITY	2,424.5	100.0	38.6	1.6	500.7	20.7	288.0	11.7	715.1	29.6	882.1	36.4
INCOME	5,247.5	100.0	1,279.7	24.4	2,133.5	40.7	468.7	8.9	645.8	12.3	719.7	13.7
# observations	3,143		1,074		1,088		211		350		420	
# families (mil.)	93.0		46.5		37.2		4.7		3.7		1.0	
Min. NW (thou.)	Negative		Negative		64.6		487.6		847.2		3,141.6	

Table 7: Amounts (billions of 2001 dollars) and shares of net worth and components distributed by net worth groups, 1992.

	Wealth percentile group											
	All families		0-50		50-90		90-95		95-99		99-100	
	Amount	Share	Amount	Share	Amount	Share	Amount	Share	Amount	Share	Amount	Share
NETWORTH	22,164.4	100.0	724.9	3.3	6,571.7	29.7	2,782.0	12.6	5,400.0	24.4	6,685.8	30.2
ASSET	25,918.4	100.0	1,690.2	6.5	8,322.6	32.1	3,122.3	12.0	5,864.8	22.6	6,918.5	26.7
FIN	8,174.8	100.0	277.4	3.4	2,319.0	28.4	1,188.9	14.5	2,230.5	27.3	2,158.9	26.4
LIQ	1,425.4	100.0	92.6	6.5	495.8	34.8	196.1	13.8	325.2	22.8	315.6	22.1
CDS	655.1	100.0	25.0	3.8	312.5	47.7	161.5	24.7	100.4	15.3	55.7	8.5
SAVBND	93.0	100.0	9.3	10.0	43.8	47.1	16.0	17.2	15.5	16.6	8.4	9.0
BOND	687.7	100.0	2.0	0.3	43.4	6.3	76.1	11.1	208.7	30.3	357.4	52.0
STOCKS	1,344.6	100.0	11.1	0.8	154.5	11.5	121.9	9.1	400.3	29.7	656.9	48.9
NMMF	622.9	100.0	8.0	1.3	144.9	23.3	96.6	15.6	212.1	34.0	161.4	25.8
RETQLIQ	2,095.3	100.0	68.4	3.3	745.6	35.6	360.3	17.2	621.2	29.6	299.8	14.3
CASHLI	499.2	100.0	41.3	8.3	237.9	47.7	60.4	12.1	123.1	24.6	36.6	7.3
OTHMA	444.2	100.0	3.4	0.8	67.1	15.1	66.6	15.0	135.2	30.4	172.0	38.7
OTHFIN	307.3	100.0	16.5	5.4	73.6	23.9	33.3	10.8	88.9	29.0	95.0	30.9
NFIN	17,743.5	100.0	1,412.7	8.0	6,003.6	33.8	1,933.3	10.9	3,634.3	20.5	4,759.6	26.8
VEHIC	1,008.5	100.0	274.6	27.2	480.7	47.7	91.1	9.0	111.6	11.1	50.6	5.0
HOUSES	8,331.7	100.0	1,036.9	12.4	4,399.0	52.8	1,016.4	12.2	1,286.2	15.4	593.1	7.1
ORESRE	1,500.9	100.0	49.4	3.3	407.7	27.2	277.2	18.5	419.0	27.9	347.6	23.2
NNRESRE	1,930.5	100.0	5.0	0.3	210.2	10.9	161.1	8.3	483.4	25.0	1,070.7	55.5
BUS	4,677.5	100.0	33.5	0.7	418.0	9.0	367.3	7.9	1,261.7	27.0	2,597.0	55.5
OTHNFIN	294.4	100.0	13.4	4.5	87.8	29.8	20.2	6.9	72.5	24.7	100.5	34.1
DEBT	3,753.9	100.0	965.2	25.7	1,750.9	46.6	340.2	9.1	464.8	12.4	232.7	6.2
MRTHEL	2,699.1	100.0	626.2	23.2	1,413.1	52.4	240.4	8.9	318.5	11.8	101.0	3.7
RESDBT	388.5	100.0	36.1	9.3	107.1	27.6	72.7	18.7	101.2	26.0	71.4	18.4
INSTALL	423.8	100.0	225.7	53.2	150.1	35.4	13.1	3.1	23.5	5.6	11.4	2.7
OTHLOC	31.2	100.0	2.3	7.4	8.1	26.0	3.3	10.6	1.7	5.2	15.9	50.8
CCBAL	119.9	100.0	57.1	47.6	51.9	43.3	5.8	4.8	4.0	3.3	1.1	0.9
ODEBT	91.3	100.0	17.7	19.4	20.6	22.6	4.9	5.3	16.0	17.5	32.0	35.1
Memo items:												
EQUITY	2,752.4	100.0	47.0	1.7	575.7	20.9	319.1	11.6	835.1	30.3	975.5	35.5
INCOME	4,751.7	100.0	1,334.7	28.1	1,987.9	41.8	425.5	9.0	600.4	12.6	403.2	8.5
# observations	3,906		1,415		1,156		242		449		644	
# families (mil.)	95.9		47.9		38.4		4.8		3.9		1.0	
Min. NW (thou.)	Negative		Negative		60.3		429.4		795.8		2,978.8	

Table 8: Amounts (billions of 2001 dollars) and shares of net worth and components distributed by net worth groups, 1995.

	Wealth percentile group											
	All families		0-50		50-90		90-95		95-99		99-100	
	Amount	Share	Amount	Share	Amount	Share	Amount	Share	Amount	Share	Amount	Share
NETWORTH	24,238.6	100.0	868.7	3.6	6,940.1	28.6	2,877.7	11.9	5,164.8	21.3	8,387.3	34.6
	596.6	0.0	30.9	0.2	141.4	0.7	151.0	0.6	249.0	0.9	456.2	1.3
ASSET	28,389.9	100.0	2,130.7	7.5	8,845.4	31.2	3,234.9	11.4	5,538.9	19.5	8,640.0	30.4
	608.8	0.0	68.5	0.3	175.8	0.7	169.5	0.6	263.4	0.8	460.7	1.2
FIN	10,422.5	100.0	382.7	3.7	2,649.1	25.4	1,421.5	13.6	2,528.0	24.3	3,441.2	33.0
	382.4	0.0	14.6	0.2	70.5	0.9	107.6	0.9	145.9	1.2	299.4	1.9
LIQ	1,452.6	100.0	98.9	6.8	439.2	30.3	160.0	11.0	255.4	17.6	499.1	34.3
	123.0	0.0	4.8	0.6	19.1	2.3	15.5	1.3	30.7	2.0	111.2	4.7
CDS	587.3	100.0	21.5	3.7	226.3	38.5	95.9	16.3	153.5	26.1	90.1	15.4
	45.9	0.0	3.3	0.6	25.5	3.7	23.7	3.7	26.0	3.6	23.2	3.9
SAVBND	137.5	100.0	10.2	7.4	65.6	47.7	26.8	19.5	27.7	20.1	7.2	5.3
	11.6	0.0	1.2	0.9	6.2	4.5	6.2	3.7	7.3	4.3	2.6	1.8
BOND	653.0	100.0	1.3	0.2	32.9	5.0	44.2	6.8	119.6	18.3	455.1	69.7
	75.5	0.0	0.8	0.1	6.8	1.1	10.2	1.5	27.2	3.9	68.4	4.5
STOCKS	1,628.7	100.0	13.1	0.8	144.8	8.9	110.3	6.8	450.6	27.7	909.9	55.9
	135.8	0.0	2.0	0.1	13.1	1.0	23.9	1.3	68.8	4.2	125.7	4.6
NMMF	1,321.7	100.0	10.2	0.8	209.8	15.9	157.9	11.9	404.2	30.7	539.6	40.7
	172.8	0.0	2.2	0.2	20.4	2.3	21.8	1.7	54.8	4.6	156.6	6.5
RETQLIQ	2,932.0	100.0	143.3	4.9	993.1	33.9	600.4	20.5	732.6	25.0	462.6	15.8
	127.0	0.0	8.2	0.3	45.4	1.5	64.6	1.9	78.9	2.5	77.3	2.3
CASHLI	750.2	100.0	59.3	7.9	359.0	47.9	106.5	14.2	94.2	12.5	131.2	17.5
	45.4	0.0	4.6	0.7	24.4	2.9	18.4	2.6	30.6	3.7	27.0	3.0
OTHMA	610.7	100.0	8.3	1.4	75.9	12.5	69.3	11.3	188.3	30.8	268.9	44.0
	74.9	0.0	2.6	0.4	11.3	2.2	20.1	3.2	35.9	5.1	62.8	6.1
OTHFIN	348.8	100.0	16.7	4.8	102.3	29.3	50.2	14.5	102.0	29.2	77.6	22.3
	44.2	0.0	2.0	0.8	13.2	3.9	15.9	4.7	41.1	8.2	14.5	4.1
NFIN	17,967.4	100.0	1,748.0	9.7	6,196.3	34.5	1,813.4	10.1	3,010.9	16.8	5,198.8	28.9
	379.7	0.0	59.5	0.4	141.6	0.9	98.1	0.5	165.9	0.8	308.5	1.3
VEHIC	1,280.6	100.0	378.4	29.6	615.2	48.0	114.5	8.9	113.5	8.9	58.9	4.6
	19.9	0.0	10.9	0.9	16.8	1.0	7.3	0.5	7.6	0.6	6.9	0.5
HOUSES	8,526.6	100.0	1,261.7	14.8	4,558.1	53.5	970.3	11.4	1,131.7	13.3	604.9	7.1
	123.7	0.0	52.0	0.6	104.5	0.9	55.8	0.6	58.3	0.6	42.6	0.5
ORESRE	1,432.4	100.0	54.4	3.8	361.6	25.2	279.4	19.5	399.8	27.9	337.2	23.5
	81.4	0.0	7.8	0.5	27.9	1.6	41.0	2.4	37.6	2.2	39.6	2.1
NNRESRE	1,420.7	100.0	7.6	0.5	185.1	13.0	152.6	10.7	441.2	31.1	634.2	44.6
	104.0	0.0	5.7	0.4	21.4	1.6	31.6	2.1	53.5	3.3	82.0	3.8
BUS	4,891.8	100.0	29.0	0.6	380.3	7.8	257.1	5.3	828.0	16.9	3,397.3	69.5
	302.2	0.0	5.1	0.1	35.6	0.8	41.6	0.8	111.7	2.1	266.8	2.4
OTHNFIN	415.4	100.0	16.9	4.1	96.0	23.1	39.5	9.5	96.6	23.3	166.4	40.0
	40.3	0.0	2.0	0.7	12.6	3.5	7.0	1.9	19.8	4.2	32.6	5.3
DEBT	4,151.3	100.0	1,262.0	30.4	1,905.3	45.9	357.2	8.6	374.1	9.0	252.7	6.1
	73.8	0.0	48.6	1.0	60.5	1.2	32.7	0.8	31.1	0.7	30.9	0.7
MRTHEL	3,033.3	100.0	856.4	28.2	1,530.4	50.5	241.0	7.9	274.6	9.1	130.9	4.3
	62.7	0.0	42.3	1.3	49.7	1.3	22.6	0.7	24.4	0.8	13.6	0.4
RESDBT	319.6	100.0	29.6	9.2	92.5	28.9	76.6	24.0	65.4	20.5	55.6	17.4
	28.4	0.0	8.7	2.5	10.3	3.4	21.9	5.6	11.4	3.4	10.9	3.1
INSTALL	494.6	100.0	266.2	53.8	178.8	36.1	21.3	4.3	18.7	3.8	9.7	2.0
	15.4	0.0	12.5	1.7	9.3	1.6	3.1	0.6	3.9	0.8	3.9	0.8
OTHLOC	23.8	100.0	5.4	22.7	4.9	20.8	1.9	8.1	1.8	7.5	9.8	41.0
	4.5	0.0	1.2	5.1	1.8	6.6	0.6	2.6	0.9	3.3	3.5	8.8
CCBAL	161.7	100.0	75.5	46.7	74.7	46.2	6.7	4.2	4.0	2.5	0.7	0.4
	5.9	0.0	3.8	1.9	4.5	1.9	1.1	0.7	0.7	0.4	0.2	0.1
ODEBT	118.3	100.0	29.0	24.7	24.1	20.3	9.7	8.2	9.6	8.3	46.0	38.6
	21.7	0.0	4.0	5.3	6.9	5.1	3.4	2.8	6.7	5.9	18.4	10.3
<i>Memo items:</i>												
EQUITY	4,154.9	100.0	90.9	2.2	746.6	18.0	492.1	11.8	1,248.6	30.1	1,576.8	37.9
	197.0	0.0	6.7	0.2	35.2	1.0	47.0	1.1	97.3	2.2	167.3	2.8
INCOME	5,105.8	100.0	1,425.5	27.9	2,073.2	40.6	464.7	9.1	555.0	10.9	587.4	11.5
	80.3	0.0	31.4	0.7	51.1	0.9	34.8	0.7	34.1	0.6	54.6	1.0
# observations	4,299		1,548		1,290		292		504		665	
# families (mil.)	99.0		49.5		39.6		5.0		4.0		1.0	
Min. NW (thou.)	Negative		Negative		67.0		448.8		778.9		2,963.1	

Definitions: Tables 6-10

Standard errors of the estimates are given in italics below each estimate.

NETWORTH: ASSET-DEBT.

ASSET: FIN+NFIN.

FIN: LIQ+CDS+SAVBND+BOND+STOCKS+NMMF+RETQLIQ+CASHLI+OTHMA+OTHFIN.

LIQ: Holdings of checking, savings, money market, and call accounts.

CDS: Holdings of certificates of deposit.

SAVBND: Holdings of savings bonds.

BOND: Direct holdings of bonds.*

STOCKS: Direct holdings of publicly traded stocks.*

NMMF: Mutual funds other than money market mutual funds.

RETQLIQ: IRAs, Keogh accounts, and other pension accounts where withdrawals or loans may be taken (such as 401(k) accounts).

CASHLI: Cash value of life insurance.

OTHMA: Equity holdings of annuities, trusts, and managed investment accounts.

OTHFIN: Value of miscellaneous financial assets (e.g., futures contracts, oil leases, royalties, etc.).

NFIN: VEHIC+HOUSES+ORESRE+BUS+OTHNFIN.

VEHIC: Market value of all personally owned automobiles, trucks, motor homes, campers, motorcycles, boats, airplanes, helicopters, and miscellaneous vehicles.

HOUSES: Market value of principal residences.

ORESRE: Market value of residential real estate other than principal residences.

NNRESRE: Net equity in real estate other than HOUSES and ORESRE.

BUS: Net equity in closely held businesses.

OTHNFIN: Value of miscellaneous nonfinancial assets (e.g., antiques, artwork, etc.).

DEBT: MRTHEL+INSTALL+OTHLOC+CCBAL+ODEBT.

MRTHEL: Amount outstanding on mortgages and home equity lines of credit secured by principal residences.

RESDBT: Amount outstanding on mortgages secured by residential real estate other than a principal residence.

INSTALL: Amount outstanding on installment debt.

OTHLOC: Amount outstanding on lines of credit other than home equity lines of credit.

CCBAL: Amount outstanding on credit cards.

ODEBT: Amount outstanding on miscellaneous debts (e.g., debts to family members, borrowing against insurance policies or pension accounts, margin debt, etc.).

EQUITY: Total value of direct and indirect stock holdings (included in STOCKS and RETQLIQ).*

INCOME: Total income for the year preceding the survey year.

* Direct holdings are those held outside of a managed asset such as mutual funds, trusts, managed investment accounts, annuities, and tax-deferred retirement accounts.

Table 11: Various asset and debt items as a percent of assets, by percentile groups of the distribution of wealth; 1989 and 2001.

	All families		0-50		50-95		90-95		95-99		99-100	
	1989	2001	1989	2001	1989	2001	1989	2001	1989	2001	1989	2001
NETWORTH	87.6	87.9	42.3	43.8	80.9	80.6	90.5	91.1	94.7	94.0	97.5	97.6
ASSET	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
FIN	30.9	42.2	22.5	19.1	26.1	35.9	33.2	50.7	36.8	47.9	32.3	45.1
LIQ	5.7	4.9	6.3	5.3	5.7	5.4	6.0	5.6	5.5	4.6	5.8	4.4
CDS	3.0	1.3	2.3	1.0	4.1	2.3	4.0	1.9	3.5	1.0	1.1	0.3
SAVBND	0.5	0.3	0.6	0.2	0.7	0.4	0.7	0.2	0.4	0.3	0.1	0.2
BOND	3.1	1.9	0.2	0.1	0.7	0.3	2.7	1.4	4.0	1.9	5.8	4.2
STOCKS	4.7	9.1	1.1	0.8	2.3	3.5	3.8	7.7	6.6	9.8	7.2	16.3
NMMF	1.7	5.1	0.3	0.9	0.8	3.5	2.1	7.9	2.5	7.2	2.1	4.9
RETQLIQ	6.5	11.9	7.1	7.0	7.6	14.5	7.8	17.8	7.8	14.8	3.6	5.5
CASHLI	1.8	2.2	2.9	2.9	2.4	3.5	2.3	3.0	1.3	1.7	1.1	1.0
OTHMA	2.3	4.6	0.2	0.3	0.9	2.0	2.1	4.7	2.9	5.5	3.9	7.2
OTHFIN	1.6	0.9	1.6	0.6	0.9	0.5	1.8	0.4	2.3	1.2	1.6	1.2
NFIN	69.1	57.8	77.5	80.9	73.9	64.1	66.8	49.3	63.2	52.1	67.7	54.9
VEHIC	3.8	3.4	17.9	17.2	5.7	5.6	2.9	2.8	1.8	1.4	0.8	0.6
HOUSES	31.4	27.1	56.7	59.7	53.8	45.9	31.8	28.1	21.4	18.5	7.7	8.3
ORESRE	5.6	4.7	2.7	1.6	5.3	4.2	8.9	4.7	7.0	6.1	4.0	4.6
NNRESRE	7.7	4.7	-2.9	0.5	2.7	2.3	5.9	3.7	8.9	7.1	15.5	6.5
BUS	18.7	16.9	1.8	1.1	5.1	5.6	15.4	9.5	22.7	18.0	36.8	33.5
OTHNFIN	1.9	0.9	1.4	0.8	1.2	0.6	2.0	0.5	1.5	1.0	3.0	1.5
DEBT	12.4	12.1	57.7	56.2	19.1	19.4	9.5	8.9	5.3	6.0	2.5	2.4
MRTHEL	8.3	9.1	32.2	38.2	14.7	15.7	6.5	7.1	3.2	4.3	0.9	1.4
RESDBT	1.2	0.8	6.4	0.6	0.9	1.0	1.6	0.7	1.1	0.9	0.5	0.4
INSTALL	2.0	1.5	15.2	12.8	2.7	1.9	0.9	0.7	0.6	0.3	0.3	0.2
OTHLOC	0.2	0.1	0.3	0.2	0.1	0.0	0.2	0.0	0.1	0.1	0.5	0.1
CCBAL	0.3	0.4	2.7	3.6	0.5	0.6	0.1	0.1	0.0	0.1	0.0	0.0
ODEBT	0.3	0.3	0.9	0.8	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3
<i>Memo item:</i>												
EQUITY	8.8	23.5	2.5	6.0	5.6	17.1	8.2	28.9	11.6	29.1	11.8	26.8

III. NEGATIVE NET WORTH

In 2001, 6.9 percent of families had negative net worth—only slightly lower than the 7.3 percent level in 1989. Because the general characteristics of the group with negative wealth changed relatively little over the period considered in this paper, the discussion here focuses on the most recent SCF cross section. For families with negative net worth in 2001, the median wealth value was \$-5,100 (table 12). Although this group had the lowest levels of wealth, a substantial part of the group had non-negligible assets—the median value was \$7,600. Across the asset distribution, the group with net worth less than \$-5,000 had more than twice the assets of the part of the group with new worth closer to zero; however, the poorer group had far more debt as well. Families with negative net worth were much less likely to have most types of assets than were all families (table 13). Among financial assets, ownership was notable only for transaction accounts (79.7 percent of families with negative wealth) and retirement accounts (23.5 percent); among nonfinancial assets, ownership was notable only for vehicles (64.7 percent) and principal residences (16.4 percent).

The proximate cause of negative net worth is that the value of debt exceeds the value of assets; thus, all families with negative net worth have some type of debt. Two types of debt were much more common among this group than among the population as a whole—installment debt and credit card debt—and they were even more common among families with net worth less than \$-5,000. Education loans and vehicle loans accounted for a very large part of the prevalence of installment debt. Installment debt accounted for almost half of the value of the group's debt, and the greatest part of the installment debt was education loans and vehicle loans (table 14). Unmeasured human capital would tend to offset the former. Of the whole group, 13.3 percent had vehicle debt exceeding the value of their vehicles; some of this disproportion may be explained by depreciation of the vehicles, but some part is also likely to be an artifact of the method used to value the vehicles in the SCF.¹⁰ Although a relatively small fraction of the

10. For most vehicles, the SCF respondents are asked the model year, make, and model of each vehicle. That information is used to match the vehicle to a market value obtained from NADA. Because some vehicles may carry expensive options that are not reflected in the basic description of the vehicle, the value attributed to such vehicles would be biased downward. For vehicles such as motor homes, boats, airplane, etc., respondents are asked to provide a value directly.

group were homeowners, mortgage debt accounted for nearly a third of the total debt of the group; the fraction was much larger for families with relatively small absolute levels of negative net worth. While only 16.4 percent of the group with negative wealth were homeowners, 40.2 percent of these homeowners had housing debt exceeding the value of a principal residence. Although credit card debt as a share of the total debt of the group was relatively small, 12.3 percent of the group had only credit card debt; for the part of the group with negative net worth between zero and \$-5,000, the share was nearly one-fifth.

The group with negative wealth differs from the overall population in terms of a number of key demographic characteristics. Consistent with the expectations of the life cycle hypothesis, families with negative net worth in 2001 were much younger than the population as a whole: 58.0 percent of the group were in the under 35 age group (table 15). The disproportion of very young families was particularly large for the group with wealth of less than \$-5,000. Those with negative net worth overall were more likely to have less than a high school education or its equivalent, and they were somewhat less likely to have any college experience. However, the group with larger absolute negative wealth differed from the group closer to zero; the group with larger absolute negative wealth was notably more likely than the overall population to have college experience; in contrast, the group with wealth closer to zero was much less likely to have college experience. As a whole, the group was substantially more likely to be working than the full population, but less likely to be self-employed. As one would expect from the age difference, a smaller fraction of the negative wealth group was retired or disabled. The proportion of families who were neither working nor retired (a group that is largely unemployed or out of the labor force) was more than twice as large in the group with negative net worth as in the whole population. The relative youth of the negative wealth group explains part of the relative concentration of the group in the lowest 40 percent of the overall income distribution. The concentration was particularly strong for the group with relatively modest absolute negative wealth—over 40 percent of this group had incomes among the lowest 20 percent of all families. The negative wealth group contained a larger fraction of nonwhite and Hispanic families than the population as a whole, but the contrast was particularly sharp for the group with wealth between zero and \$-5,000—nearly half of this group was minorities,

compared with only about a quarter of the whole population as measured in the SCF.¹¹ The negative wealth group was relatively concentrated in the southern and western regions.

11. In the SCF, the racial and ethnic identification of respondents is determined based on a single question that allows multiple responses using as categories “White,” “Black/African American,” “Hispanic/Latino,” “Asian,” “American Indian/Alaska Native,” “Native Hawaiian/Other Pacific Islander,” and an open-ended category that was subsequently classified in a formal coding operation. The open-ended category almost always yielded responses that could have been coded directly into another of the categories provided. Respondents were asked to list first the category with which they identify most strongly. A very small number of respondents gave more than one answer, and taking account of additional responses has a very small effect on most analyses. Only the first three categories contain sufficient numbers of observations to make separately classified analysis statistically meaningful. Although the “White” and “Black/African American” categories appear to yield good population estimates over time, the “Hispanic/Latino” classification does not appear as stable when compared to estimates from the Current Population Survey (CPS) of the U.S. Bureau of the Census. The CPS takes a different approach to measurement; it asks two questions: one about racial identification and one about ethnic identification that can be used to determine whether a person fits a definition of “Hispanic.” Comparison of SCF and CPS data suggest that people who identify as “Hispanic/Latino” in the SCF are poorer in terms of income than people who would be classified in this way by the CPS. In a time of substantial migration of Hispanics who tend to be economically disadvantaged, using the SCF to characterize changes for all Hispanics might well lead to misleading conclusions. See Aizcorbe *et al.* [2003] for additional discussion of the measurement of racial and ethnic identification in the SCF.

Table 12: Quantiles of net worth, assets, debt, financial assets, and nonfinancial assets; families with negative net worth, those with net worth of negative \$5,000 or less, those with negative net worth greater than negative \$5,000, and all families; 2001.

	<i>NW<0</i>			
	<i>All</i>	<i>NW≤-5K</i>	<i>NW>-5K</i>	<i>All</i>
NETWORTH				
10	-27.5	-33.6	-3.9	0.1
25	-13.4	-24.0	-2.6	12.7
50	-5.1	-13.2	-1.3	86.1
75	-1.3	-8.4	-0.4	283.0
90	-0.4	-6.0	-0.2	734.4
ASSET				
10	0.0	0.5	0.0	4.1
25	1.2	3.5	0.1	27.6
50	7.6	11.5	5.2	136.0
75	19.6	28.5	14.2	358.7
90	69.1	83.8	43.0	815.4
DEBT				
10	1.1	10.0	0.4	0.0
25	5.8	16.3	1.6	0.0
50	16.3	28.0	7.0	14.5
75	38.9	62.2	15.7	78.3
90	83.0	122.4	46.4	145.2

Table 14: Percent distribution of debt; families with negative net worth, those with net worth of negative \$5,000 or less, those with negative net worth greater than negative \$5,000, and all families; 2001.

	<i>NW<0</i>			
	<i>All</i>	<i>NW≤-5K</i>	<i>NW>-5K</i>	<i>All</i>
DEBT	100.0	100.0	100.0	100.0
MRTHEL	32.1	28.3	42.4	75.1
RESDBT	1.2	0.5	3.1	6.4
INSTALL	48.1	52.6	35.9	12.3
CCBAL	13.2	11.8	17.0	3.4
OTHLOC	0.7	0.9	0.2	0.5
ODEBT	4.6	5.9	1.4	2.3
<i>Memo items:</i>				
Education loan	25.3	30.6	11.0	2.9
Vehicle loan	14.3	11.8	21.2	7.2
Asset value<debt:				
House<mortgage	6.6	8.9	4.2	1.0
Vehicles<loans	13.3	12.8	13.9	2.9

Table 13: Percent of families having various components of net worth; families with negative net worth, those with net worth of negative \$5,000 or less, those with negative net worth greater than negative \$5,000, and all families; 2001.

	<i>NW<0</i>			
	<i>NW<0</i>	<i>NW≤-5K</i>	<i>NW>-5K</i>	<i>All</i>
NET WORTH	100.0	100.0	100.0	100.0
ASSET	90.7	96.1	85.2	96.7
FIN	83.9	91.9	75.8	93.1
LIQ	79.7	86.4	72.8	91.0
CDS	0.5	1.0	0.0	15.7
SAVBND	8.0	9.8	6.1	16.7
BOND	0.0	0.0	0.0	3.0
STOCKS	7.6	9.8	5.3	21.3
NMMF	5.8	11.0	0.6	17.7
RETQLIQ	23.5	27.3	19.6	52.2
CASHLI	6.7	6.3	7.1	28.0
OTHMA	0.0	0.0	0.0	6.7
OTHFIN	9.1	8.3	9.9	9.3
NFIN	70.3	79.4	61.0	90.7
VEHIC	64.7	74.4	54.8	84.8
HOUSES	16.4	19.1	13.6	67.7
ORESRE	1.0	0.7	1.2	11.4
NNRESRE	0.0	0.0	0.0	8.3
BUS	2.5	2.9	2.1	11.9
OTHFIN	9.1	8.3	9.9	9.3
DEBT	100.0	100.0	100.0	75.1
MRTHEL	15.5	17.3	13.6	44.6
RESDBT	0.8	0.5	1.0	4.7
INSTALL	78.2	87.5	68.7	45.1
CCBAL	71.4	74.4	68.3	44.4
OTHLOC	3.8	4.0	3.6	1.6
ODEBT	16.4	19.9	12.8	7.2
<i>Memo items:</i>				
EQUITY	41.4	47.5	35.3	34.9
Vehicle loan	41.4	11.8	21.2	7.2
Education loan	44.3	62.9	25.3	6.9
Only debt is credit card debt	12.3	5.0	19.8	7.7

Table 15: Percent distribution of families across various groups; families with negative net worth, those with net worth of negative \$5,000 or less, those with negative net worth greater than negative \$5,000, and all families; 2001.

	<i>NW<0</i>			<i>All</i>
	<i>All</i>	<i>NW≤-5K</i>	<i>NW>-5K</i>	
Age of head (years)				
Less than 35	58.0	62.7	53.1	22.7
35-44	20.3	22.5	18.0	22.3
45-54	12.8	11.3	14.2	20.6
55-64	3.8	3.4	4.2	13.3
65-74	2.3	0.0	4.7	10.7
75 or more	2.9	0.0	5.9	10.4
Education of head				
No high school diploma	19.4	13.1	25.9	16.0
High school diploma	30.6	25.4	36.0	31.7
Some college	23.6	24.2	23.1	18.3
College degree	26.3	37.3	15.1	34.0
Work status of head				
Wkg for someone else	72.4	73.8	71.1	60.9
Self-employed	6.6	10.0	3.0	11.7
Retired/disabled	11.5	5.8	17.3	22.9
Other not working	9.6	10.5	8.6	4.5
Percentiles of income				
Less than 20	35.2	28.1	42.5	20.0
20-39.9	30.2	28.8	31.6	20.0
40-59.9	22.4	28.2	16.6	20.0
60-79.9	10.9	12.4	9.3	20.0
80-89.9	1.3	2.5	0.0	10.0
90-100	0.0	0.0	0.0	10.0
Race or ethnicity				
White non-Hispanic	62.3	72.3	52.0	76.2
Non white or Hispanic	37.8	27.7	48.0	23.8
Region				
Northeast	16.8	13.3	20.4	19.0
North central	18.7	21.1	16.2	23.0
South	38.1	38.9	37.3	36.2
West	26.4	26.7	26.1	21.8

IV. WEALTH OF THE OLDER “BABY BOOMERS”

The changes in wealth discussed so far are only changes in distributions, not changes for individuals. Life cycle factors alone suggest that there should have been considerable movement within the wealth distribution as a result of saving for educational expenses and retirement and dissaving to pay for those expenses. At the same time, differential returns on assets and differential growth of income to support saving would drive mobility across the distribution. The earlier discussion of the Forbes 400 indicates that differential returns are probably a very large factor in mobility for people who already have considerable assets. Unfortunately, the SCF does not have a panel dimension over the time considered in this paper that would allow one to characterize wealth mobility. Earlier work by Kennickell and Starr-McCluer [1997] using a 1983-1989 SCF panel indicates that during that period most movement was within the broad middle of the wealth distribution; the most stable group was the lowest quartile (about 71 percent were in the group in both 1983 and 1989), and the second most stable was the highest 1 percent (about 51 percent were in the group in both years). Hurst et al. [1998] provide similar evidence using data from the 1984-1994 waves of the Panel Study on Income Dynamics.

Despite the lack of panel structure in the SCF, it is possible to follow age cohorts over time, at least under the assumption that membership in the cohort is fixed. Death, immigration, and changes in living arrangements may be serious problems in this type of analysis. For example, individuals in older families are more likely to die. Immigration seems to be more of an issue for relatively young families than for older ones. Changes in living arrangements—marriage, divorce, living in secondary household units, living outside a standard household (e.g., a dormitory or barracks)—is also relatively more common among younger people. For these reasons, the analysis here focuses on the cohort aged 46 to 55 in 2001 (34 to 43 in 1989), a group this encompasses most of the older part of the “baby boom” generation. Families headed by persons in this age range accounted for about 20 percent of all families in 2001.

With some notable interruptions in 1992, the wealth level of this cohort trended broadly upward during the 1989-2001 period (table 16). At the very bottom of the distribution, the

percent of families in the cohort with negative wealth fell from 9.5 percent in 1989 to 4.1 percent in 2001, though the great majority of that decline occurred in 1992. At the top end, the proportion of millionaires (in 2001 dollars) more than tripled to 10.1 percent, and the fraction with wealth between \$500,000 and \$1 million doubled.

The upward shift may be clearer when viewed in terms of quantiles of the wealth distribution (table 17). The pattern of percentage growth over the quantiles shown was U-shaped over this time. Simply by rising to a strictly positive amount, wealth rose proportionately the most at the 10th percentile for the cohort, but as was the case for families overall at this point in the distribution, the level of wealth was very low (zero dollars in 1989 and \$3,000 in 2001). In contrast to the other points of the distribution of the cohort's wealth shown in the table, wealth at the 25th percentile rose consistently over the period, for a total gain of 260 percent—though the rate of increase dropped off over the most recent three-year period. This growth substantially exceeded that at the higher percentiles, which ranged from 102.5 percent at the median to 143.3 percent at the 90th percentile; the dollar amounts at the higher percentiles were, of course, far larger.

As one would expect from life cycle patterns in income and retirement saving, the cohort increased its wealth relative to that of the population as a whole in nearly every survey between 1989 and 2001 at all the points from the 25th percentile and above; the 10th percentile values for both the age cohort and the full population are so small as to make such a comparison unreliable or impossible. The disproportion in the cohort's wealth is particularly large at the median and 25th percentiles across this period; in 2001, the 25th percentile of their wealth was 256.6 percent of that of the population as a whole, whereas the 90th percentile of the cohort's wealth was 138.5 percent of the value for the population as a whole.

The faster growth at the bottom of the distribution of the group's wealth than at the top of the distribution suggests that the cohort's wealth may have become less concentrated over the period. However, such a conclusion turns on how neighboring parts of the distribution mirror the quantiles shown. Although limited in its descriptive ability, the Gini coefficient of wealth does provide a summary of the gains and losses across the distribution (table 18). The point estimates of that statistic suggest that from 1989 to 2001 there was a steady upward trend in

wealth concentration as measured by this statistic—from 0.74 in 1989 to 0.78 in 2001. However, the estimated standard errors are large relative to the size of the differences.

When concentration is broken out by wealth percentile groups (table 19), the shift in wealth shares is clearest in the decline in the share of the 50th to 90th percentiles of the distribution—a pattern that shows less strongly for all age groups as a whole—and the rise in the share of the 95th to 99th percentile group. Compared to the population as a whole, wealth seems somewhat less concentrated for this cohort. However, the standard errors of the ownership shares are also quite large relative to the differences.

Table 16: Percent distribution of cohort aged 44 to 55 in 2001 over wealth groups defined in terms of 2001 dollars; 1989-2001.

<i>Net worth (2001 dollars)</i>	<i>Survey year</i>				
	<i>1989</i>	<i>1992</i>	<i>1995</i>	<i>1998</i>	<i>2001</i>
<\$0	9.5	4.9	4.7	5.3	4.1
\$0-\$999	6.7	4.8	3.7	4.1	3.8
\$1,000-\$2,499	2.5	4.4	1.5	1.0	1.2
\$2,500-\$4,999	3.2	2.9	4.1	3.0	2.7
\$5,000-\$9,999	3.8	4.7	3.6	3.7	2.8
\$10,000-\$24,999	7.1	10.7	7.8	6.1	6.1
\$25,000-\$49,999	11.9	12.9	11.9	9.6	10.0
\$50,000-\$99,999	15.6	16.5	18.8	15.1	11.5
\$100,000-\$249,999	21.6	23.2	24.4	24.1	22.6
\$250,000-\$500,000	10.1	8.4	8.9	13.3	14.8
\$500,000-\$999,999	5.1	3.6	6.8	8.5	10.2
≥\$1,000,000	2.9	3.0	3.7	6.1	10.1
All families	100.0	100.0	100.0	100.0	100.0

Figure 17: Quantiles of net worth in thousands of \$2001 and percent change in quantiles for age cohort aged 46 to 55 in 2001; 1989-2001.

	<i>Percentile of net worth</i>				
	<i>10</i>	<i>25</i>	<i>50</i>	<i>75</i>	<i>90</i>
1989	0.0	9.1	69.3	180.3	418.1
1992	1.1	14.1	63.1	163.7	343.7
<i>% chg 1989-1992</i>	NA	55.9	-8.9	-9.2	-17.8
1995	2.5	23.2	79.0	202.2	530.4
<i>% chg 1992-1995</i>	138.8	63.9	25.2	23.5	54.3
1998	1.9	29.8	105.6	287.3	673.4
<i>% chg 1995-1998</i>	-26.3	28.5	33.7	42.1	27.0
2001	3.0	32.7	140.3	386.7	1,017.3
<i>% chg 1998-2001</i>	63.0	9.7	32.8	34.6	51.1
<i>%chg 1989-2001</i>	NA	260.0	102.5	114.4	143.3
<i>Memo item:</i>					
Cohort value as % of value for whole population					
1989	NA	119.8	107.3	89.2	82.5
1992	NA	156.9	102.9	89.6	77.8
1995	NA	201.0	119.0	108.9	120.5
1998	NA	274.9	135.4	126.3	125.2
2001	NA	256.6	162.9	136.7	138.5

Table 18: Gini coefficient for net worth of cohort aged 46 to 55 in 2001; 1989-2001.

Gini coefficient	
1989	0.74 <i>0.02</i>
1992	0.75 <i>0.01</i>
1995	0.75 <i>0.01</i>
1998	0.76 <i>0.01</i>
2001	0.78 <i>0.01</i>

Table 19: Percent of net worth held by various groups defined in terms of percentiles of the distribution of net worth; cohort aged 46 to 55 in 2001; 1989, 1992, 1995, 1998, and 2001.

<i>Year</i>	<i>Percentile group</i>				
	0-49.9	50-89.9	90-94.9	95-98.9	99-100
1989	2.6 <i>2.2</i>	36.0 <i>3.7</i>	13.9 <i>2.4</i>	21.5 <i>4.0</i>	26.0 <i>5.0</i>
1992	4.6 <i>0.6</i>	31.2 <i>2.3</i>	11.5 <i>1.3</i>	23.2 <i>3.0</i>	29.5 <i>4.5</i>
1995	5.5 <i>0.4</i>	30.8 <i>1.8</i>	12.7 <i>1.6</i>	20.7 <i>2.9</i>	30.3 <i>3.9</i>
1998	4.7 <i>0.5</i>	30.2 <i>2.0</i>	11.6 <i>1.5</i>	23.0 <i>3.2</i>	30.4 <i>4.1</i>
2001	4.2 <i>0.3</i>	29.1 <i>1.8</i>	12.0 <i>1.4</i>	26.5 <i>2.4</i>	28.2 <i>3.3</i>

III. THE WEALTH OF AFRICAN AMERICANS

This section focuses on changes in the wealth of African Americans between 1989 and 2001, using white non-Hispanic families as a comparison group. Although the raw sample numbers of African Americans in the SCF (table 20) are not sufficient to allow a very detailed decomposition of differences, the samples are sufficient for a range of comparisons.

Table 20: Number of African American and White non-Hispanic respondents to the SCF, 1989-2001.

Year	African Americans	White non-Hispanics
1989	308	2,558
1992	358	3,147
1995	380	3,562
1998	414	3,502
2001	462	3,587

Median wealth of white non-Hispanics was 18.5 times that of African Americans in 1989 (table 21); that multiple dropped sharply to 7.1 in 1992 and was 6.4 in 2001, a bit up from 1998. At the same time, mean wealth of white non-Hispanics ranged between about 5 and 6 times the mean wealth of African Americans. From 1989, the growth rate of the African American median was above that for white non-Hispanics until 2001, when the rate for the former dropped a few percentage points below

the latter. Over this period differences in the growth rates of the means were mixed.

Underlying these relatively crude distributional indicators were more complex differences. Over all the years of data analyzed here, African American families were far more likely to have wealth of \$1,000 or less than were white non-Hispanic families, but the difference narrowed (table 22). In 1989, 37.6 percent of African American families had net worth less than \$1,000, compared with 9.5 percent of white non-Hispanic families; by 2001, the figure for African Americans had dropped to 27.0 percent and the figure for white non-Hispanics was 8.0 percent. At the other end of the distribution, a far larger fraction of white non-Hispanic families had wealth of at least \$500,000 than was the case for African American families across the period. Both groups show the share of families in this group declining from 1989 to 1992 and then rising substantially by 2001, with faster growth for African Americans from a much lower level. Still, in 2001 the share of white non-Hispanic families with this level of wealth was 7.6 times that of African American families. Nonetheless, there was a substantial fraction of African American families over the period with “middle class” values of net worth between

\$25,000 and \$250,000—about 40 percent of African American families in 2001 compared with 43 percent of white non-Hispanic families. Although African American families are somewhat more heavily represented at the lower end of this range, it is clear from figure 6 that the most striking differences are at the extremes of the wealth distribution.

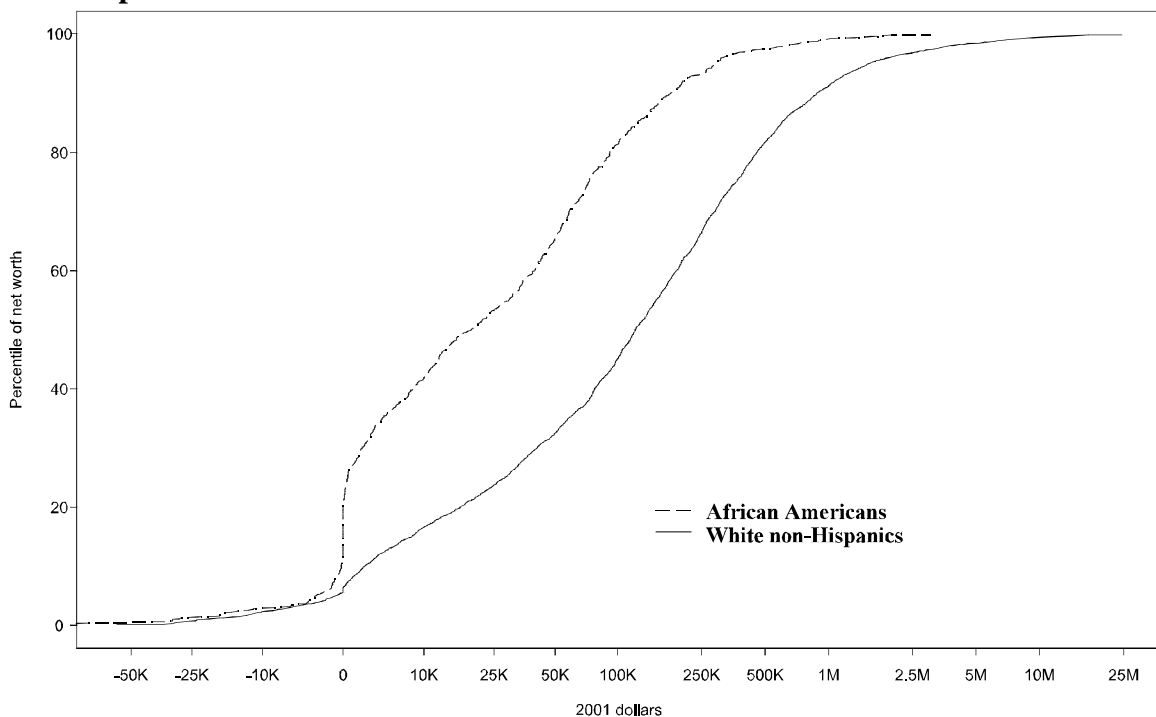
Table 21: Median and mean net worth in thousands of 2001 dollars, percent change in median and mean net worth; African Americans and white non-Hispanics, 1989-2001.

	Median		White non-		Ratio: NHW/ AA	Mean		White non-		Ratio: NHW/ AA
	African Americans	% change	Hispanics	% change		African Americans	% change	Hispanics	% change	
1989	5.3	*	97.8	*	18.5	57.0	*	317.6	*	5.6
1992	12.2	130.2	86.3	-11.8	7.1	59.4	4.2	275.5	-13.3	4.6
1995	12.6	3.3	88.5	2.5	7.0	51.0	-14.1	289.8	5.2	5.7
1998	16.8	33.3	103.5	16.9	6.2	69.9	37.1	365.3	26.1	5.2
2001	19.0	13.1	121.0	16.9	6.4	75.7	8.3	468.2	28.2	6.2

Table 22: Percent distribution of families over wealth groups defined in terms of 2001 dollars, for African Americans and white non-Hispanics; 1989, 1992, 1995, 1998, and 2001.

Net worth	Survey year									
	1989		1992		1995		1998		2001	
	AA	WNH	AA	WNH	AA	WNH	AA	WNH	AA	WNH
<0	12.2	5.5	10.7	6.0	13.6	5.8	12.1	6.9	11.2	5.6
0-1K	25.4	4.0	19.0	2.9	16.6	2.5	14.7	3.8	15.8	2.4
1K-2.5K	5.3	2.7	5.5	2.9	6.8	1.8	4.0	2.0	3.8	2.0
2.5K-5K	6.7	3.2	5.7	3.3	5.5	2.9	4.0	2.5	4.9	2.6
5K-10K	5.6	3.5	7.6	4.2	5.6	5.0	8.1	4.0	6.0	3.8
10K-25K	4.8	9.0	11.3	9.0	10.6	9.1	12.4	7.2	11.6	7.2
25K-50K	13.2	8.8	11.9	10.4	12.8	10.0	12.5	9.3	12.0	8.7
50K-100K	12.8	13.9	12.6	15.1	16.3	16.1	12.1	13.4	16.1	12.6
100K-250K	9.8	23.4	10.9	24.8	8.9	25.2	15.5	23.8	11.8	21.4
250K-500K	3.1	13.4	3.7	11.2	2.5	11.1	3.5	14.2	4.4	15.3
≥500K	1.4	12.7	1.1	10.3	0.9	10.5	1.4	13.0	2.4	18.2
All of group	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Figure 6: Cumulative distribution of wealth in 2001: African Americans and white non-Hispanics.



A plot of the differences in the levels of the distributions for the two groups shows clearly how wide the gap is across the distribution (figure 7a). The 2001 data show that African Americans had much lower wealth at virtually every level including larger absolute values of negative wealth for those at the bottom end. Viewed as percent of the wealth of white non-Hispanics, the difference is 90 percent or more for most of the distribution (figure 7b). Data for the other years of the SCF show a similar pattern.

Looking at movements across the years of data shows a mixture of gains and losses for African Americans relative to white non-Hispanics. Figure 8 shows a relative Q-D plot of distributional shifts between 1989 and 2001 as a percent of 1989 levels, for African Americans and white non-Hispanics. Movements for the lowest 20 percent of the distribution appear quite noisy, but at least over the 1989-2001 interval, the lowest 10 percent of African American families and white non-Hispanic families saw a substantial absolute increase in their levels of negative net worth. The next highest 10 percent have wealth values too close to zero for the changes to be meaningful.

For the groups between the 20th and 60th percentiles, the data show strong growth over this period, but particularly so for African Americans. Within the period (not shown), this group of African Americans showed a substantial growth rate from 1989 to 1992 compared with a decline for white non-Hispanics, little movement for either group from 1992 to 1995, and a substantially larger growth rate from 1995 to 1998. More recently, the 1998-2001 data show that the growth rate for the upper half of this percentile group of African Americans fell to approximately the same rate as that for white non-Hispanics, but the lower half largely saw losses; for all except the very top of the wealthiest 40 percent of African Americans, the growth rate was far below that for white non-Hispanics (figure 9). These data also make clear the hazard in using the median as an indicator of overall change; from 1998 to 2001, the growth at the median for African Americans was below that for white non-Hispanics, but the rates were much more similar in nearby percentiles.

An important driver of increases for African Americans over the 1989-2001 period was simply increased ownership of assets (table 23). In 1989, 76.7 percent of such families owned any asset, and in 2001, the figure was 89.5 percent; in contrast, the figure for white non-Hispanics was already close to 100 percent in both years. The most notable increase in ownership for African Americans was in direct and indirect holdings of publicly traded stocks—the rate more than tripled over the period. There were also notable increases in their holdings of liquid assets, retirement accounts, and vehicles, and the increases were greater than those for white non-Hispanics. Both groups saw about a 5 percent increase in their home ownership rates. However, with the exception of a miscellaneous category of financial assets, the ownership rates on all other types of assets among African Americans remained below those for white non-Hispanics.

The prevalence of debt among African Americans rose to nearly the level for white non-Hispanics in 2001, and growth in prevalence since 1989 was strongest for mortgages and credit card balances. In both 1989 and 2001, African Americans were notably more likely than white non-Hispanics to have credit card debt.

When the portfolio holdings of each group are viewed as a proportion of their total wealth, some differences are even sharper (table 24). Relative to the case for white non-Hispanics, the assets of African Americans in 2001 were more heavily weighted toward

nonfinancial assets—with notably larger portfolio shares for principal residences and vehicles and a notably lower share for businesses. Among financial assets, the portfolio share of direct and indirect holdings of publicly traded stocks for African Americans was about half the level for white non-Hispanics. African Americans were also much more highly leveraged; their total debt amounted to 29.6 percent of their assets, while the debt of white non-Hispanics families was only 11.1 percent of their assets. About two-thirds of the leverage of African Americans was explained by mortgage borrowing; although the frequency of credit card debt was high for the group, it amounted to only 1.5 percent of total assets.

One might well argue that aggregate portfolio shares are so influenced by very large values of assets held by a small number of families that they give a distorted impression of more “typical” families. Excluding the wealthiest and poorest 10 percent of the distribution of wealth in each group is one way of testing the sensitivity of the share estimates (table 25). For both racial groups, the most striking changes under this constraint are a large increase in the share of principal residences and a decline in the share of direct and indirect holdings of publicly traded stocks. Moreover, residences remain a much larger share of the assets of African Americans than is the case for white non-Hispanics. The share of businesses for white non-Hispanics falls sharply, but it still remains well above that for African Americans.

In light of the other evidence presented, it is not surprising that African Americans hold less than their population share of every asset and liability considered here (table 26). In 2001, the population and ownership shares were close only for installment debt and credit card debt; cash value life insurance and vehicles were the only assets where their ownership share was more than half of their population share.

As noted above, a large fraction of African Americans had zero or negative wealth over the period considered here. The fact that this proportion is so much higher than is the case among white non-Hispanics implies that wealth among African Americans is more concentrated in this simple sense among African Americans. In addition, the data indicate that some assets—for example, principal residences and businesses—are relatively more concentrated by at least some measures than is the case among white non-Hispanics. Point estimates of the Gini coefficient of wealth calculated for African Americans alone indicate that the wealth of African Americans in 1989 may have been more concentrated by this measure than was the case among

white non-Hispanics, but that from 1995 to 2001, the direction of difference was reversed (table 27). However, according to the estimated standard errors, none of these differences are significant.

Estimates of the concentration of wealth among various percentile groups for the two groups shows some interesting patterns, but the standard errors of the estimates for African Americans are very large (table 28). The large standard error is a reflection both of the relatively small number of African American respondents and particularly of the small number of very wealthy African American families in the SCF. However, the stability of the patterns over time suggests that those patterns reflect more than random variation. The point estimates show a tendency for the wealthiest 1 percent of African Americans to own a smaller fraction of the group's net worth than is the case for white non-Hispanics. At the other end of the wealth spectrum, the lowest 50 percent of the distribution for African Americans holds a very small share of wealth that is far smaller than the already small share for that wealth group among white non-Hispanics. The largest difference between the racial groups appears to be in the wealth group between the 50th and 90th percentiles of the distribution: wealth is relatively more concentrated among this group for African Americans than is the case for the comparison group.

Figure 7a: Quantile difference plot: wealth of white non-Hispanics minus wealth of African Americans; 2001 dollars; 2001.

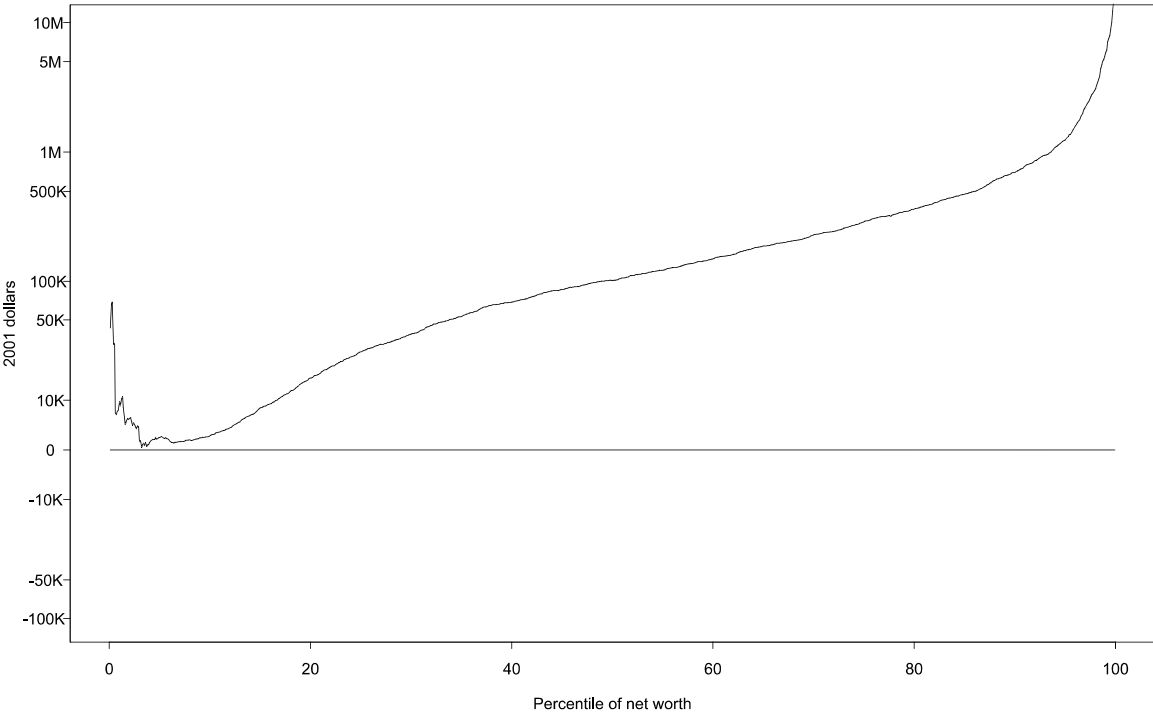


Figure 7b: Relative quantile difference plot: wealth of white non-Hispanics minus wealth of African Americans, as a percent of wealth of white non-Hispanics; 2001.

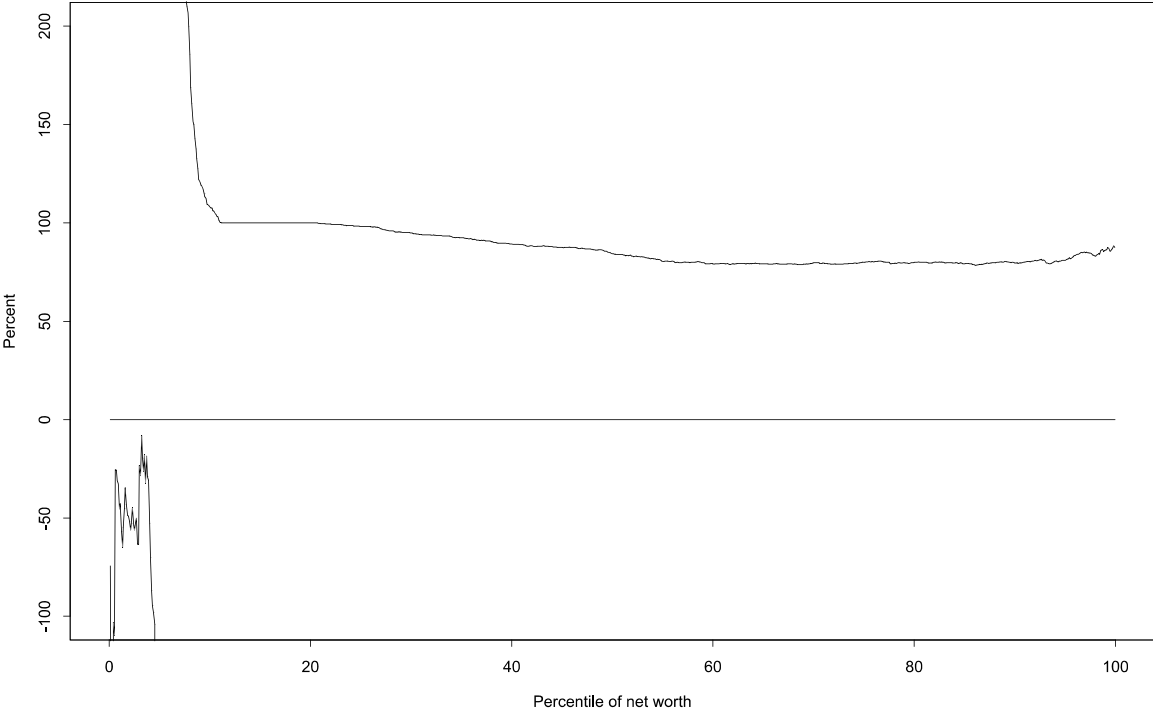


Figure 8: Relative quantile difference plot: wealth in 2001 minus wealth in 1989 as a percent of wealth in 1989 (2001 dollars); African Americans and white non-Hispanics.

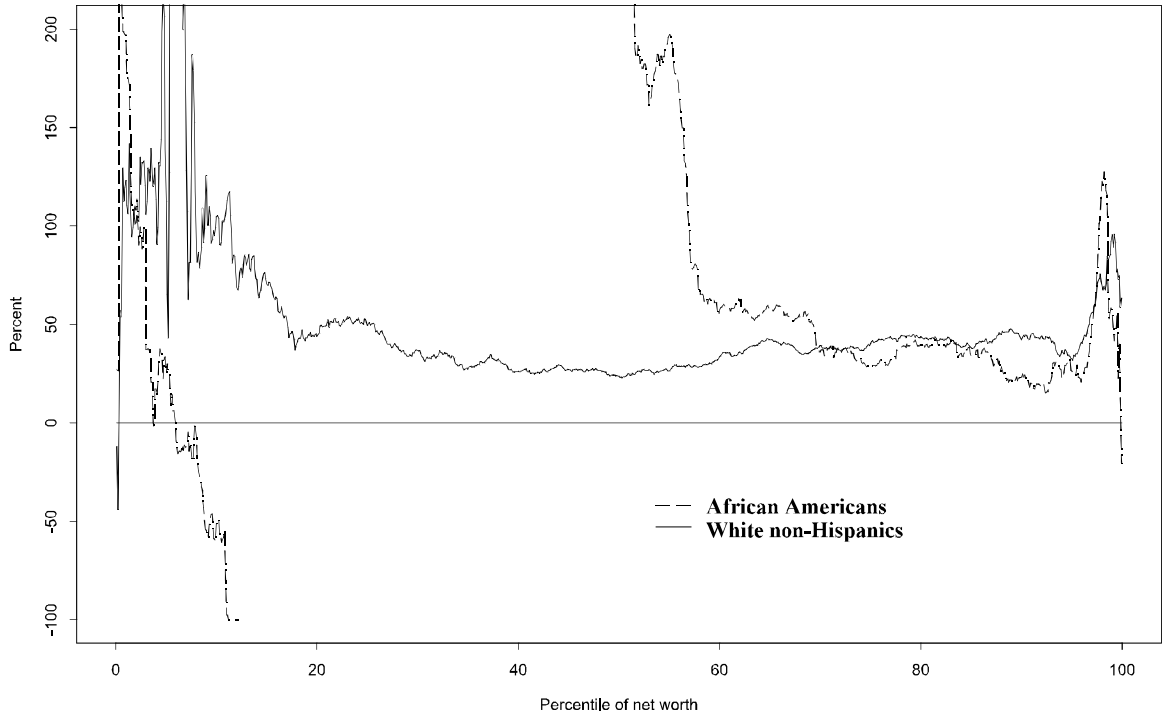


Figure 9: Relative quantile difference plot: wealth in 2001 minus wealth in 1998 as a percent of wealth in 1998 (2001 dollars); African Americans and white non-Hispanics.

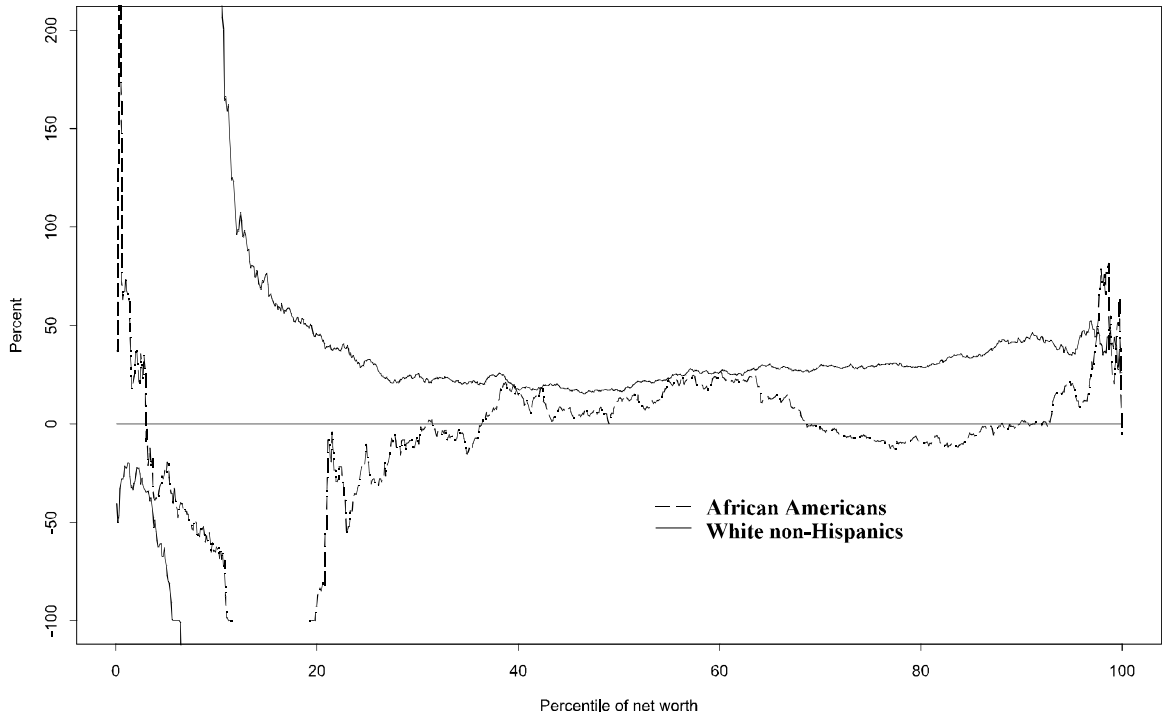


Table 23: Percent of African Americans and white non-Hispanics owning various components of net worth, 1989 and 2001.

	<u>African Americans</u>		<u>White non-Hisp.</u>	
	1989	2001	1989	2001
NW	100.0	100.0	100.0	100.0
ASSET	76.7	89.5	98.4	99.0
FIN	63.3	84.6	95.0	96.5
LIQ	56.4	81.0	92.4	94.9
CDS	3.7	6.5	25.0	18.5
SAVBND	9.8	10.3	28.0	19.5
BOND	0.5	0.5	7.2	3.8
STOCKS	3.6	9.6	21.0	24.5
NMMF	0.7	7.8	9.4	20.9
RETQLIQ	17.1	38.9	43.4	56.9
CASHLI	24.0	28.6	40.0	29.8
OTHMA	1.6	2.1	4.6	8.2
OTHFIN	10.0	9.9	14.5	9.2
NFIN	66.6	76.5	94.0	94.7
VEHIC	56.9	69.9	89.2	89.1
HOUSES	42.4	47.4	70.5	74.1
ORESRE	7.6	6.4	14.9	12.9
NNRESRE	4.8	5.0	12.8	9.6
BUS	4.8	3.0	13.7	14.0
OTHNFIN	5.1	2.2	14.7	9.0
DEBT	65.1	74.0	73.2	75.8
MRTHEL	24.8	36.5	43.0	47.6
RESDBT	2.7	2.3	5.9	5.4
INSTALL	47.4	47.2	49.3	45.3
OTHLOC	2.8	1.0	3.0	1.7
CCBAL	33.4	52.1	41.4	43.3
ODEBT	3.4	4.9	7.2	7.4
<i>Memo item:</i>				
EQUITY	10.6	34.2	38.3	57.5

Table 24: Holdings of various wealth items and holdings as a percent of total assets, for African Americans and white non-Hispanics, 2001.

	<u>African Americans</u>		<u>White non-Hispanics</u>	
	Amount (B2001\$)	% of assets	Amount (B2001\$)	% of assets
ASSET	1,493.3	100.0	44,373.3	100.0
FIN	496.7	33.3	19,222.0	43.3
LIQ	71.2	4.8	2,211.2	5.0
CDS	13.2	0.9	582.8	1.3
SAVBND	4.4	0.3	132.6	0.3
BOND	0.5	0.0	917.5	2.1
STOCKS	45.3	3.0	4,241.5	9.6
NMMF	36.3	2.4	2,387.1	5.4
RETQLIQ	169.4	11.3	5,317.2	12.0
CASHLI	95.8	6.4	924.9	2.1
OTHMA	38.0	2.5	2,130.8	4.8
OTHFIN	22.6	1.5	376.4	0.8
NFIN	996.6	66.7	25,151.3	56.7
VEHIC	130.2	8.7	1,409.0	3.2
HOUSES	630.9	42.2	11,508.0	25.9
ORESRE	90.1	6.0	2,060.1	4.6
NNRESRE	93.5	6.3	2,083.6	4.7
BUS	41.1	2.8	7,653.0	17.2
OTHNFIN	10.7	0.7	437.6	1.0
DEBT	442.4	29.6	4,912.70	11.1
MRTHEL	311.2	20.8	3,711.6	8.4
RESDBT	20.6	1.4	322.4	0.7
INSTALL	82.7	5.5	569.2	1.3
OTHLOC	1.8	0.1	27.6	0.1
CCBAL	22.4	1.5	154.1	0.3
ODEBT	3.6	0.2	127.8	0.3
<i>Memo item:</i>				
EQUITY	203.2	13.6	10,852.10	24.5

Table 25: Holdings of various wealth items and holdings as a percent of total assets, for African Americans and white non-Hispanics, central 80 percent of the wealth distribution for each group, 2001.

	<u>African Americans</u>		<u>White non-Hispanics</u>	
	Amount (B2001\$)	% of assets	Amount (B2001\$)	% of assets
ASSET	716.7	100.0	16213.3	100.0
FIN	173.6	24.2	5862.3	36.2
LIQ	32.7	4.6	886	5.5
CDS	7.3	1.0	368.2	2.3
SAVBND	3.2	0.4	64.8	0.4
BOND	0.2	0.0	61.8	0.4
STOCKS	4.9	0.7	567.5	3.5
NMMF	8.6	1.2	617.8	3.8
RETQLIQ	69.6	9.7	2345.2	14.5
CASHLI	42.7	6.0	518.4	3.2
OTHMA	2.5	0.3	352.0	2.2
OTHFIN	1.8	0.3	80.5	0.5
NFIN	543.2	75.8	10351.0	63.8
VEHIC	91.7	12.8	1044.7	6.4
HOUSES	416.4	58.1	7383.9	45.5
ORESRE	23.2	3.2	605.6	3.7
NNRESRE	6.8	0.9	363.1	2.2
BUS	4.8	0.7	852.2	5.3
OTHNFIN	0.3	0.0	101.4	0.6
DEBT	308.5	43.0	3444.6	21.2
MRTHEL	232.8	32.5	2749.7	17.0
RESDBT	11.2	1.6	141.9	0.9
INSTALL	48.5	6.8	392.7	2.4
OTHLOC	0.2	0.0	8.9	0.1
CCBAL	14.9	2.1	114.8	0.7
ODEBT	0.9	0.1	36.7	0.2
<i>Memo item:</i>				
EQUITY	51	7.1	2840.8	17.5

Table 26: Share of net worth and components held by African Americans and white non-Hispanics, 1989 and 2001.

	<u>African Americans</u>		<u>White non-Hisp.</u>	
	1989	2001	1989	2001
NETWORTH	2.8	2.5	91.4	93.1
ASSET	3.1	3.1	90.3	92.1
FIN	2.1	2.4	94.5	94.5
LIQ	2.8	3.0	92.0	92.9
CDS	1.4	2.1	95.8	93.3
SAVBND	3.2	3.2	92.8	94.9
BOND	0.2	0.1	98.0	99.3
STOCKS	0.1	1.0	98.2	97.0
NMMF	0.8	1.5	98.0	96.3
RETQLIQ	2.9	3.0	92.3	93.0
CASHLI	4.0	8.9	90.0	85.8
OTHMA	0.7	1.7	98.9	96.5
OTHFIN	8.9	5.5	88.4	91.3
NFIN	3.5	3.6	88.5	90.3
VEHIC	6.2	7.9	84.4	85.1
HOUSES	4.9	4.8	86.4	88.1
ORESRE	4.3	4.0	87.3	91.3
NNRESRE	2.7	4.1	89.9	91.4
BUS	0.7	0.5	92.2	94.0
OTHNFIN	4.9	2.4	91.4	96.1
DEBT	5.3	7.6	83.1	84.5
MRTHL	4.8	7.1	82.9	84.9
RESDBT	2.0	5.6	87.1	87.1
INSTALL	8.9	11.6	81.0	79.7
OTHLOC	2.0	6.1	95.8	92.6
CCBAL	12.1	11.5	75.4	78.8
ODEBT	3.2	2.7	84.7	94.3
<i>Memo item:</i>				
EQUITY	1.1	1.8	96.7	95.7
% of families	12.7	13.0	74.8	76.2

Table 27: Gini coefficient for net worth, African Americans and white non-Hispanics, 1989-2001.

	1989	1992	1995	1998	2001
African Americans	0.80 <i>0.03</i>	0.77 <i>0.02</i>	0.75 <i>0.03</i>	0.75 <i>0.03</i>	0.76 <i>0.03</i>
White non-Hisp.	0.76 <i>0.01</i>	0.76 <i>0.01</i>	0.77 <i>0.01</i>	0.78 <i>0.01</i>	0.78 <i>0.01</i>

Table 28: Percent of net worth held by various groups defined in terms of percentiles of the distribution of net worth; African Americans and white non-Hispanics; 1989, 1992, 1995, 1998, and 2001.

<i>Year</i> <i>Race</i>	<i>Percentile group</i>				
	0-49.9	50-89.9	90-94.9	95-98.9	99-100
1989					
AA	-0.5 <i>0.5</i>	34.0 <i>4.8</i>	14.9 <i>3.3</i>	23.7 <i>7.1</i>	27.9 <i>10.1</i>
WN-H	4.2 <i>0.5</i>	31.2 <i>1.8</i>	12.9 <i>1.5</i>	23.5 <i>2.6</i>	28.2 <i>2.4</i>
1992					
AA	1.0 <i>0.3</i>	37.8 <i>4.1</i>	16.2 <i>3.1</i>	22.8 <i>6.4</i>	22.3 <i>8.5</i>
WN-H	4.5 <i>0.3</i>	30.6 <i>1.2</i>	12.5 <i>0.9</i>	23.5 <i>1.5</i>	28.9 <i>2.1</i>
1995					
AA	0.7 <i>0.4</i>	40.0 <i>4.4</i>	15.0 <i>2.5</i>	22.3 <i>4.2</i>	22.1 <i>7.2</i>
WN-H	4.7 <i>0.2</i>	29.2 <i>0.8</i>	11.7 <i>0.6</i>	21.1 <i>1.2</i>	33.3 <i>1.5</i>
1998					
AA	1.3 <i>0.4</i>	39.9 <i>4.4</i>	15.1 <i>3.0</i>	20.2 <i>4.7</i>	23.4 <i>7.7</i>
WN-H	4.1 <i>0.2</i>	28.7 <i>0.9</i>	11.2 <i>0.7</i>	23.4 <i>2.1</i>	32.7 <i>2.3</i>
2001					
AA	0.9 <i>0.5</i>	36.5 <i>3.9</i>	14.9 <i>3.2</i>	25.1 <i>7.2</i>	22.6 <i>9.2</i>
WN-H	3.9 <i>0.2</i>	28.3 <i>0.7</i>	11.9 <i>0.7</i>	25.0 <i>1.8</i>	30.8 <i>2.1</i>

V. CONCLUSIONS

The value of a family's wealth is the joint outcome of the possibilities the family faced combined with the decisions they made. The period from 1989 to 2001 saw important changes in the financial services offered to families, and in other structures in the economy. Thus, it is not surprising that there were also many changes in a variety of aspects of the wealth distribution. However, given the magnitude of the economic changes, it is remarkable how narrowly defined many of the distributional changes were. This section summarizes the findings that seem most noteworthy.

From 1989 to 2001, wealth grew broadly across families. Characterizing distributional changes is much more complex, and much more dependent on the specific questions asked. For example, there is evidence both from *Forbes* data on the 400 wealthiest Americans and from the SCF, which explicitly excludes families in the *Forbes* list, that wealth grew relatively strongly at the very top of the distribution. In addition, the share of total household wealth held by the *Forbes* rose, and there was an increase in concentration even in the top of that group. However, while the point estimate of the share of total wealth held by the wealthiest one percent of families as measured by the SCF also rose, the change is not statistically significant; as noted in the paper, it is possible that despite the use of a more robust estimator of standard errors for the SCF than has been used in previous analysis of the wealth distribution, some of the simplifying assumptions necessary may still lead to inflated estimates of confidence intervals. A key stylized fact is that during this period, the division of wealth observed in the SCF attributes roughly a third each to the wealthiest 1 percent, the next wealthiest 9 percent, and the remainder of the population.

Relative to everyone else, the wealth of the highest 10 percent of the wealth distribution tends to be heavy in terms of holdings of most assets and liabilities, but it is particularly so for stocks, bonds, business assets, and real estate investments. For other families, simple deposit accounts, houses, and vehicles are the most important assets, and mortgages are the most important liability. Changes in shares were surprisingly few—a shift away from the wealthiest 10 percent in the total share of stock holdings, a shift toward that group in the share of housing equity, and an increase in the share of non-mortgage debt (largely installment debt and credit

card debt) among the least wealthy half of the population. Overall, leverage tends to decline sharply with wealth.

Although families with less than zero wealth are very hard to characterize in terms of distributional changes, they are a substantial fraction of the population—about 7 percent in 2001. Credit card debt and installment debt are much more common among this group than the population as a whole; education loans and vehicle loans are the major sources of installment loans. The group is disproportionately young—in 2001, almost 60 percent were headed by people age 35 and younger—which suggests that for some of the group, the condition of having negative wealth is temporary. However, there are some interesting differences between families with large absolute negative net worth and those with negative net worth closer to zero. The group with larger absolute negative wealth was more likely to have assets to offset debts, to be younger, and to have some college experience.

A close analysis of the members of the “*Forbes* 400” suggests that despite substantial churning, there is still a fairly high degree of stability in terms of high wealth status. Unfortunately, the SCF does not have panel data on the rest of the population for the period considered in this paper. However, it is still possible to say something about changes for groups that have relatively constant characteristics. The paper considered the case of one age cohort and the set of African American families.

The age cohort considered comprises the majority of the older “baby boomers”—families headed by persons between the ages of 46 and 55 in 2001. Wealth for this group shows the expected life cycle pattern of increase. Although that growth appears to be spread broadly, the most striking growth was at the bottom and the top of the wealth distribution. The number of inflation-adjusted millionaires in the cohort more than tripled over the 1989-2001 period. Overall, the data for the cohort suggest that the concentration of wealth rose over the period, but the estimated standard errors are large relative to the size of the increases.

The last analytical section compares the wealth of African American families with that of white non-Hispanic families. The median wealth of African Americans in 1989 was only about 5 percent of that for white non-Hispanic families, and by 2001, the fraction had risen to about 16 percent. Differences are most striking at the two ends of the distribution of wealth. A

the higher fraction of African American families have net worth less than zero and a much higher fraction have wealth between zero and \$1,000. At the top end of the distribution, the differences are reversed with a much larger fraction of white non-Hispanics having wealth of \$250,000 or more. However, for the group of families in the center of the distribution, there was strong growth between 1989 and 2001. Although the evidence is weak, the data suggest that wealth among African Americans is less concentrated at the top of the distribution than is the case for white non-Hispanics; wealth is relatively more concentrated in the 40 percent of the distribution at the median and above—largely reflecting the high fraction of African Americans below the median with very low levels of wealth.

The SCF data are a very rich source of wealth data, and many more slices may be made of the data beyond the ones presented in this paper. At least two such cuts seem potentially quite fruitful. Given the length of the period of comparable SCF cross-sections, more extended cohort analysis seems an important priority. At the same time, the deep changes in the available array of financial services suggest that there would be great value in extending the analysis of portfolio structure as well as the types of institutional relationships that support that structure.

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