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Tossed and Turned: Wealth Dynamics of U.S. Households 2007-2009

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Abstract

For many years, the cross-sectional Survey of Consumer Finances (SCF) has shown relatively weak or inconsistent changes in the shape of the distribution of net worth, despite many shifts in income and other economic factors. In 2009, households that had taken part in the 2007 SCF were re-interviewed to obtain information on the changes in their financial condition over the period of the intervening financial crisis. Looked at as a second cross section, the 2009 data show a pattern of wealth distribution very similar in shape to what had been seen in the earlier cross sections. Between the two years, however, there was considerable variation in the relative positions of households within the wealth distribution. This paper presents data on the changed situation of households and it decomposes the observed wealth changes in terms of underlying portfolio shifts. It is generally recognized that changes in the value of residential real estate, corporate equities and private businesses were important sources of wealth losses. Although the data presented here confirm that picture, they also show a great deal of heterogeneity below the aggregate level. The observed stability of the pseudo-cross-sectional wealth shares in the panel despite the underlying turmoil is largely a consequence of changes in values of businesses and equities among comparatively wealthy households offsetting changes in the value of housing assets among other households.

The analysis and conclusions set forth are those of the authors and do not indicate concurrence by other members of the research staff or the Board of Governors. The author is grateful for the contributions of Jesse Bricker, Brian Bucks, Gerhard Fries, Traci Mach, Kevin Moore and other Federal Reserve colleagues; Catherine Haggerty, Micah Sjoblom and other NORC central office and field staff; Susan Boehmer, Barry Johnson, David Paris, Michael Parisi and other staff at the Statistics of Income Division of the IRS; and attendees at the Banque de France conference on Saving and Portfolio Choice of Households, where preliminary results from this paper were first presented. Above all, the author is grateful to the respondents to the SCF for their generosity in sharing their personal information in the interest of research. The author is solely responsible for any errors of commission or omission in this paper.

Wealth in the U.S. is highly concentrated. Moreover, as shown later in this paper, the available consistent evidence suggests that the degree of concentration has not changed dramatically and consistently for possibly the last 50 years. Given the degree of economic change and turbulence over this time, it would be astonishing if deeper examination did not reveal considerable shifting over time beneath the level of this apparent stability. As is obvious even from the aggregated level of the Flow of Funds Accounts, the composition of household portfolios changed dramatically. But the distribution of changes across households over time is much harder to address, largely because the necessary data have been so limited.

This paper presents new evidence on wealth dynamics over the 2007–2009 period, using two waves of panel data collected for the Survey of Consumer Finances (SCF). This period witnessed substantial overall losses in wealth, and thus might be expected to throw patterns of change into high relief. Taking the two panel waves as if they were independent cross sections, however, indicates that the distribution of net worth changed little, aside from an overall drop in the level. At the same time, the data indicate that there was very substantial variation in outcomes across households for 2009, relative to their condition in 2007. Although households were more likely to see wealth declines than increases, many households did have substantial increases in their wealth.

The next section of this paper gives technical background on the SCF panel. The second section presents general results on the distribution of wealth, along with more limited information on income. The third section looks at the portfolio shifts that underlie the movement of households within the wealth distribution. A final section concludes.

I. The 2007–2009 SCF Panel

The SCF normally operates as a cross-sectional survey conducted on a triennial basis. In 2009, a re-interview with participants in the 2007 survey was authorized by the Federal Reserve Board as an extraordinary effort in order to understand better the effects of the financial crisis during that time on the finances of U.S. households.[1] Previous experience with panel data in the SCF dated from the 1983–1986–1989 surveys (see Avery and Kennickell [1991]). The relevance of those surveys for present purposes is diminished by the much abbreviated nature of the 1986 survey, which rendered change measures quite noisy, and the very long period between the larger

[1] See Bucks *et al.* [2011] for additional discussion of the panel survey and some of its key results.

1983 and 1989 surveys; changes measured over the 1983 and 1989 endpoint were affected greatly by changes in household composition in the intervening years as well as by the cumulative effects of nonresponse. The 1962 Survey of Financial Characteristic of Consumers (SFCC) (Projector and Weiss [1966]) and its follow-up survey, the 1963 Survey of Changes in Financial Characteristics of Consumers (SCFCC) (Projector [1968]), were designed as surveys of wealth and they used a sampling methodology similar to that of the later SCFs. There are other sources of panel data that contain some information on wealth (e.g., the Panel Study on Income Dynamics), but the SCF is the only U.S. survey that covers the entire population and also has a credible claim to represent the full spectrum of the wealth distribution, as described below.

The cross-sectional SCF is designed to provide detailed information on households' wealth, their use of financial institutions, and a variety of other items useful in understanding household finances. Since 1989, it has used a consistent set of core questions, which have changed only as necessary to accommodate changes in the variety of financial options available to households or shifts in households' understanding of the subject. For the recent surveys, the median interview length has been about 90 minutes, but complex cases occasionally have taken several hours. Because it was believed that it might be too difficult to persuade respondents to take part in a second such lengthy interview, the panel interview was designed to be considerably shorter—approximately 45 minutes—as well as less variable in length. Although the 2009 panel questionnaire covered all of the same concepts as the 2007 survey, it collected much less detail. To maximize comparability of the items reported, the panel questionnaire used question sequencing and framing as consistent as possible with that in the 2007 questionnaire.

To support its focus on wealth measurement, the SCF employs a special sample design. A multi-stage area-probability sample (see Tourangeau *et al.* [1993]) provides robust coverage of financial behavior that is broadly spread in the population. A list sample (Kennickell [2001]) is used to over sample households that tend to be relatively wealthy; that sample is selected under stringent restrictions from statistical records derived from individual income-tax returns. Evaluation of the list sample (see Kennickell [2007]) suggests that without this sample component, the survey would miss about a third of household net worth and it would provide substantially noisier estimates of many important statistics.

Because households are not necessarily fixed in composition over time, the panel required an operational definition of the target household for the interview. Ideally, all initial

household members might have been followed, but cost constraints forced a narrower objective. If the 2007 respondent was still alive and living permanently in the U.S., the 2009 household of that person was the target for the panel. If that person had died or moved permanently out of the country, but their 2007 spouse or partner was still alive and a U.S. resident, then the household of that spouse of partner was the target. Otherwise, the case was considered ineligible for re-interview. The panel survey achieved a response rate among eligible 2007 participants of about 89 percent and there were no important variations in that rate across key sample groups (see Kennickell [2010]).

Nonresponse-adjusted analysis weights were constructed for the panel, using exactly the same methodology as for the original cross-section; in essence, the out-of-scope cases and the panel participants were weighted as if they had been among the set of participants in 2009, but of course they were excluded from the panel analysis. Thus, the households of panel participants approximately represent domestic households surviving from 2007, not the full set of households in existence in 2009.[2] It differs from a cross-sectional survey in 2009 mainly in that it under-represents the youngest households and newly arrived immigrants; because the time gap between the surveys is only two years, the effect of this difference should be small for the purposes of this paper.

Changes in household structure over the two-year term of the panel undoubtedly cause some distortion in measures of change, relative to what would be obtained by following individual household members and aggregating identical sets of household members in the two periods. The informational burden of such an approach in the SCF, however, would be so large as to be infeasible. Although there is no unambiguous standard for gauging the degree of difference in household structure, about 90 percent of panel households appear to have had the same couple or single individual at its core in both years; among the remaining 10 percent, about equal numbers of households in 2009 contained a newly formed couple or a newly single individual. Some exploration suggests that the key results presented here are not unduly affected by such changes.

Item nonresponse is a seemingly inevitable fact of life in household surveys, and the heavy focus on dollar amounts in the SCF tends to exacerbate that problem. Many items

[2] The approximation here relates to the reconfiguration of people across households. See Bricker *et al.* [2010] for discussion of household change in the panel; variations in treatment of changes in household structure do not appear to affect the general findings reported in this paper.

requested in the survey are considered quite sensitive by some people, some people do not understand their finances very well and are not willing or able to use records, and sometimes values requested may not be unambiguous (for example, the value of a personal business often cannot be known until an active effort is made to sell it). To accommodate respondents' reluctance or lack of knowledge and the inherent imprecision of the answers to some questions, the SCF incorporates a method of capturing answers to dollar-denominated questions as ranges, as well as a single response. Such range information is used to constrain the outcomes. Missing values in both years of the panel were imputed jointly using software built specifically for the SCF.[3]

The utility of panel data for assessing change is also critically dependent on the degree of reporting error in the data. It is a practical impossibility to eliminate errors and inconsistencies entirely, but data editing can identify some classes of resolvable problems and can sometimes allow bounds to be placed on the set of possible outcomes. The SCF 2009 panel data were jointly reviewed with a version of the baseline 2007 data aggregated or recoded to be maximally comparable with the panel data. A critical input in this review was the set of comments interviewers left to explain usual circumstances, and the contents of a debriefing interview that interviewers were required to complete for every case. The SCF approach to editing is intended to be conservative, but still, many changes were made based on the case review or, when large discrepancies were identified, on information obtained from re-contacting the respondent.[4]

Data for the survey were collected by NORC at the University of Chicago. The overwhelming bulk of interviews for the 2007 SCF were conducted between May and December of 2007, but some interviews were completed as late as March 2008.[5] The panel interviews were concentrated between July and December of 2009, but some were completed in January of the following year. It was operationally infeasible to coordinate interviews to maintain a precise two-year interval between the pairs of interviews. While there is some consequent blurring of change as measured in the panel, the timing of the large events in the economic background suggests that the survey should have done sufficiently well in capturing change for individual households and the period overall.

[3] See Kennickell [2011] for a discussion of missing data and imputation in the SCF panel.
[4] See Kennickell [2011] for further discussion of the panel editing.
[5] All 2007 dollar figures reported in the paper have been adjusted to 2009 dollars.

II. The Wealth Distribution

A. Movement within the wealth distribution

The distribution of wealth depends, obviously, on the definition of wealth considered. Here, wealth is taken to be the value of all assets where the household has an equity interest, less the amount of all outstanding debt (see Bucks *et al.* [2009]). [6] The principal assets excluded are defined-benefit pension plans, and trust accounts where the household has only rights to receive income from the trust.

Table 1: Mean and median net worth, 2007, 2009 and change from 2007 to 2009; SCF panel cases.

Statistic	2007 (th. 2009 $)	2009 (th. 2009 $)	Change 2007-2009 (percent)
Mean	595.4	481.5	-19.3
Median	125.4	96	-23.4
Memo: total income[*]			
Mean	87.3	76.5	-12.3
Median	50.1	49.8	-0.5

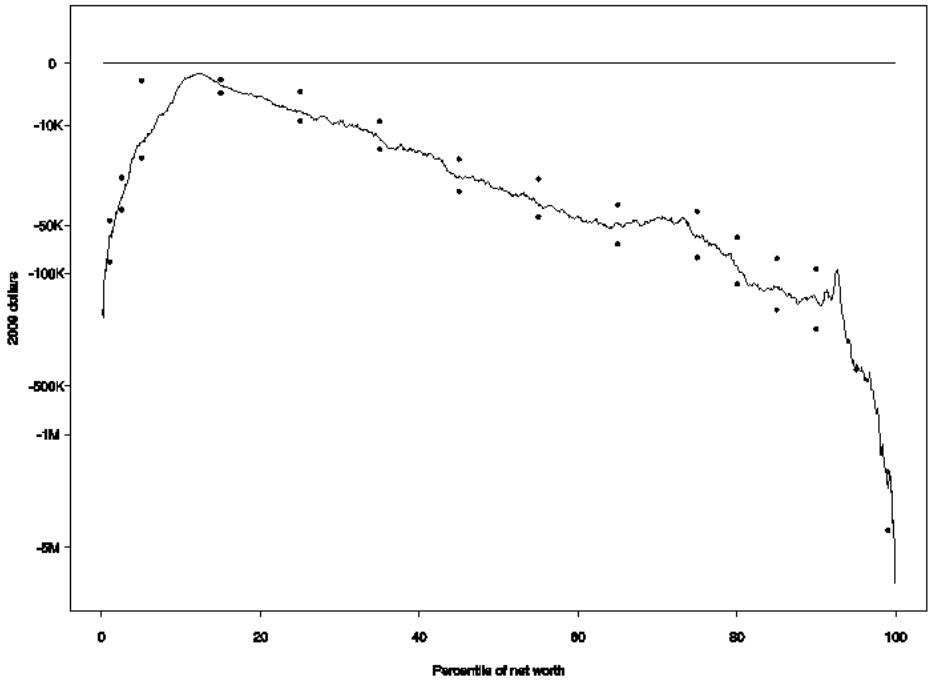
* Here, income is a broad measure for the calendar year preceding the survey, including wages, business or self-employment income, interest, dividends, capital gains, pensions, transfer payments, and miscellaneous sources of income.

To get a sense of the nature of the wealth transitions between 2007 and 2009, it is first useful to consider the interviews of cases interviewed in each of the two years as independent cross sections. Considering either the mean or the median of wealth in those two surveys, there was a substantial decline—about 19 percent for the mean and 23 percent for the median (table 1).[7]

[6] There are many possible alternative definitions. Wolff [1998], for example, omits vehicles but to include any debts associated with vehicles; relative the definition used in this paper, this definition would tend to make many people in the lower part of the wealth distribution appear much worse off and to rearrange the ordering of low-wealth households so that those with no assets at all would appear substantially wealthier than households that a vehicle debt of exactly the same amount as the value of their vehicle and no other assets. Other possibilities are discussed in Kennickell [2009]. In this paper, all dollar values reported or used in calculations of changes in levels have been adjusted to 2009 dollars.

[7] The set of cases considered here differs from that used in other reported analysis of the full 2007 data. As noted earlier, the panel cases do not include participants in 2007 who declined to participate again and ones who were considered out of scope for re-interview (loosely speaking, where the respondent was either dead or permanently out of the country). Mean net worth estimated for the full 2007 data is $556,300 and the median is $120,300. See Bricker *et al.* [2011] for a detailed analysis of the panel data by demographic groups.

Figure 1: Quantile-difference plot of wealth, 2009 minus 2007 values.

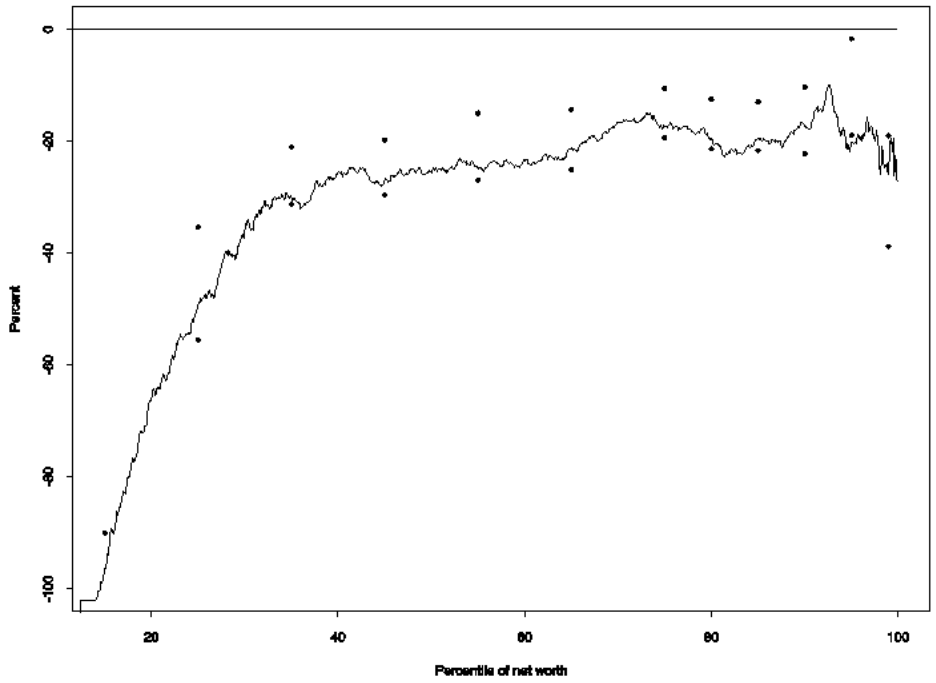


This pattern of decline shows up across the wealth distribution. The quantile-difference plot (the difference in the values of two distributions at each quantile point) of the wealth distribution in 2009 less the distribution in 2007, shown in figure 1, indicates that the absolute amount of decline increased progressively from a difference close to zero both below and above about the 10th percentile. The vertically paired of dots in the figure indicate the 95 percent point-wise confidence intervals at selected percentiles. The decline and its gradient are clearly statistically significant.

Because wealth rises across the distribution by definition, obviously the figure does not provide direct information on relative changes, which could be used to assess shifts in relative distribution. To address this question, figure 2 shows the estimates in figure 1 normalized by 2007 wealth values. Thus, at each point the figure shows the percentage change in the value at each quantile level from 2007 to 2009. The figure is truncated below at about the 15th percentile; below that point relatively small changes around zero and the relative thinness of the sample cause the estimates to be excessively noisy. In this relative sense, the largest declines were below the 30th percentile; above that point, the relative change lies in about the same range of confidence intervals, between negative 20 and 30 percent. These results might be taken to

suggest that while every group experienced a decline, there was some shifting of the distribution away from those at the bottom of the wealth distribution. In fact, a closer examination of changes in the panel data presents a more complicated picture.

Figure 2: Relative quantile-difference plot of wealth, 2009 minus 2007 values relative to 2007 values.



Wealth change at the level of individual households is clearly bimodal. As may be seen from the figures reported in table 2, somewhat under two-thirds of households experienced wealth losses from 2007 to 2009, but over a third saw gains. Thus, the location of the overall median change falls among household with losses at about the dividing line between the third of households with the smallest absolute losses and those with larger absolute losses. For this reason, some people focused only on losses over this period may find the overall median decline measured in the SCF "surprisingly small."

The median amounts of the gains and the losses were substantial, both as a level and as a percent of a household's 2007 wealth. The median amount of gain was a bit more than half of the absolute value of the median loss, but it was about three-quarters as large in terms of percent change; one implication is that at least around the center of the groups with gains or losses, those with gains tended to have smaller wealth in 2007 than those with losses. Although the 20.8 percent overall median wealth decline is close to the 23.4 percent decline in the medians of the

distributions for the two years, the levels of the changes—$-11,400 for the median change and $-29,400 for the change in the medians—indicate that there was substantial shifting of households across the wealth distribution, as will be made clear below.

Table 2: Household-level change in wealth from 2007 to 2009,

Group	Percent of households	Median percent change	Median amount of change
All households	100.0	-20.8	$-11,400
Households with losses	62.5	-41.7	$-60,400
Household with gains	36.8	32.8	$32,800
Households with no change	0.7	0.0	$0

To give insight into the degree of shifting between 2007 and 2009, figure 3 shows a type of bivariate copula distribution (a distribution normalized to percentiles) for wealth in the two years; this structure abstracts from levels in order to focus on changes in relative positions. This graph was constructed by arraying households in five-percentile groups of 2007 and of 2009 wealth and plotting the percent of households in each possible combination of the two groups. By definition, the sum of all the volume under the plot is 100 percent, and by design, the volume under every five-percentile interval of each year summed across the opposing year is exactly five percent. Thus, the largest volume possible under a given square defined by a five-percentile group in each year is exactly five percent.

Three things are immediately clear from the figure. First, there is a ridge down the center of the distribution, which indicates that the modal outcome for each ranked group in 2007 was to remain in or near the same ranked group in 2009. Second, across the broad center of the 2007 distribution, there was considerable rank dispersion in 2009, with only around one-fifth of households remaining in the same group in 2009. Third, rank persistence appears greatest at the bottom and top ends of the wealth distribution. To some extent, this third result is an artifact of the constraint that the very lowest and the very highest groups can only move in one direction. Nonetheless, the similar, but less pronounced, pattern shown by neighboring groups indicates that there is greater persistence in wealth rank among those who are relatively poor or relatively wealthy.

Figure 3: Copula distribution of wealth in 2007 and 2009.

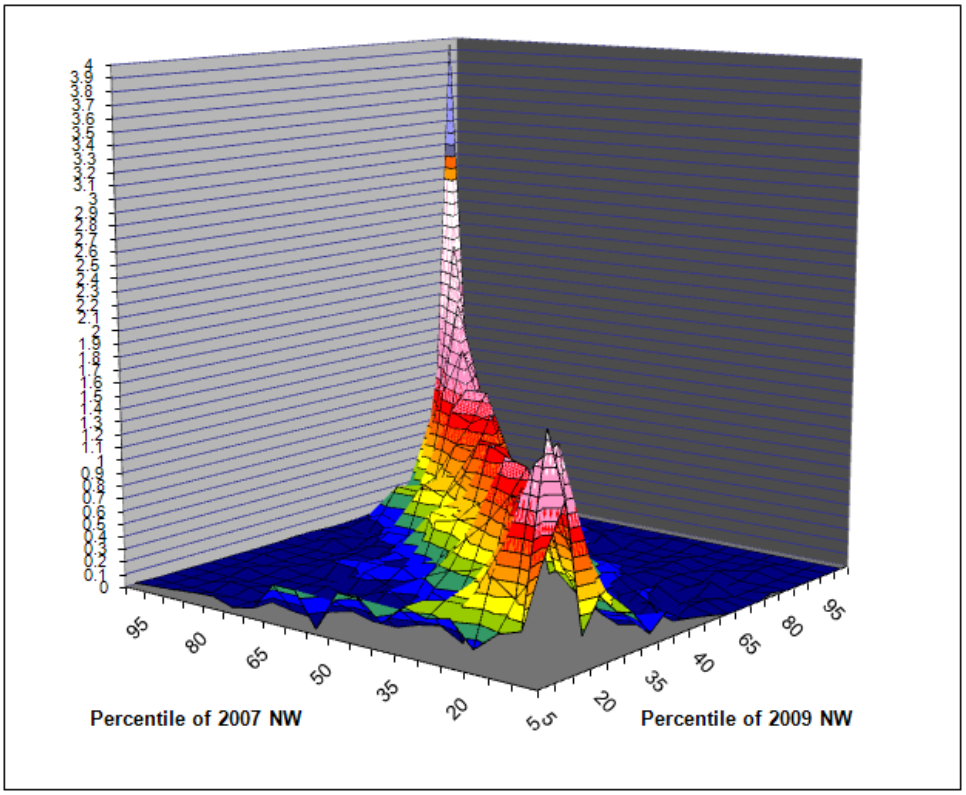


Table 3: Percent of families in various percentile groups of 2009 wealth or income, by 2007 wealth or income percentile group.

2007wealth/	*2009 wealth group*				*2009 income group*			
income group	*0-50*	*50-90*	*90-99*	*99-100*	*0-50*	*50-90*	*90-99*	*99-100*
0-50	88.3	11.6	0.1	0.0	84.6	14.9	0.5	0.0
	0.8	*0.8*	*0.1*	*0.0*	*0.7*	*0.7*	*0.2*	*0.0*
50-90	14.4	80.4	5.2	0.0	18.2	75.3	6.5	0.0
	0.9	*1.1*	*0.6*	*0.0*	*1.2*	*1.1*	*0.6*	*0.0*
90-99	1.0	22.3	73.0	3.6	4.3	26.1	65.1	4.4
	0.4	*2.1*	*2.2*	*0.7*	*0.8*	*2.1*	*2.2*	*0.7*
99-100	0.3	1.7	31.1	66.8	3.3	7.9	30.2	56.7
	0.5	*2.1*	*5.4*	*5.3*	*1.1*	*2.5*	*4.3*	*4.6*

Note: Standard errors are given in italics below each estimate.

Throughout the remainder of this paper, many results are reported for the following percentile groups, mainly defined by wealth but also by income: 0–50, 50–90, 90–99 and 99–100.[8] Experience suggests that these break points do a reasonable job of separating households into groups that have sufficient commonality to be examined jointly for the purposes of this paper. As expected, the choice of group sizes affects the measure of within-group persistence

[8] The wealth values corresponding to those percentile points are given in appendix table A1 for a number of years.

(table 3). For example, among the wealthiest one percent of households in 2007, about 67 percent were still in that group in 2009, compared with approximately 80 percent of families that were among the wealthiest five percent in 2007.[9] As may be seen from the table, mobility across groups was more likely in the case of income than of wealth.

Rank correlation provides one means of summarizing the transitions in relative wealth holdings. Overall, the correlation between households' wealth rank in 2007 and their wealth rank in 2009 was 87 percent, somewhat *higher* than the rank correlation of household income in the two periods (table 4). Reflecting the large dollar losses for those at the top of the distribution, the rank correlation between 2007 wealth and the change in wealth is negative 40 percent, which is much more pronounced than the comparable relationship for income.

Table 4: Rank correlations of 2007 and 2009 wealth, 2007 and 2009 income, and changes in wealth and income from 2007 to 2009.

	R_NW07	R_NW09	R_DEL_NW	R_INC07	R_INC09	R_DEL_INC
R_NW07	1.00	0.87	-0.40	0.59	0.51	-0.15
	0.00	*0.00*	*0.02*	*0.01*	*0.01*	*0.02*
R_NW09	0.87	1.00	-0.04	0.54	0.51	-0.07
	0.00	*0.00*	*0.02*	*0.01*	*0.01*	*0.02*
R_DEL_NW	-0.40	-0.04	1.00	-0.20	-0.10	0.19
	0.02	*0.02*	*0.00*	*0.01*	*0.02*	*0.02*
R_INC07	0.59	0.54	-0.20	1.00	0.82	-0.26
	0.01	*0.01*	*0.01*	*0.00*	*0.01*	*0.01*
R_INC09	0.51	0.51	-0.10	0.82	1.00	0.22
	0.01	*0.01*	*0.02*	*0.01*	*0.00*	*0.01*
R_DEL_INC	-0.15	-0.07	0.19	-0.26	0.22	1.00
	0.02	*0.02*	*0.02*	*0.01*	*0.01*	*0.00*

Note: Standard errors are given in italics below each estimate.

[9] By comparison, data from the one-year change between the 1962 SCFF and the 1963 SCFCC, a period of economic growth, show a higher persistence within wealth group, even adjusting for the shorter time interval (table).

Table: Percent of families in various percentile groups of 1963 wealth, by 1962 wealth percentile group.

1962 group	*1963 group*			
	0-50	*50-90*	*90-99*	*99-100*
0-50	95.8	4.3	0.0	0.0
50-90	5.4	93.1	1.5	0.0
90-99	0.0	7.0	92.0	1.1
99-100	0.0	0.0	3.7	96.3

B. Changes in wealth shares

Over the history of the current series of SCFs and antecedents that are at least reasonably comparable, one striking finding has been the relatively small changes in the shares of wealth owned by different parts of the wealth distribution, particularly given the widely noted changes in the distribution of income (table 5). For example, the share of the wealthiest one percent of households has shown no significant change since 1995; the statistically significant upward shift for this group from the previous two surveys was accompanied by a decline in the share of the next-wealthiest group of households.[10] Over the 1989–2007 period, the wealth share of the least wealth half of the population declined by one-half percent, a small but nonetheless statistically significant amount. Roughly speaking, over this period, the wealthiest one percent of households held about a third of total household wealth, the next wealthiest group held about another third and the residual third was divided over the remaining 90 percent of households, with all except a few percent of that attributable to the 40 percent of households above the median.

When the data for the set of participants in the 2007–2009 SCF panel are viewed as two years of cross sectional data, they show that the wealth share of the least wealthy half of households fell significantly from 2.5 percent of the total to 1.5 percent—a small absolute change, but a very large proportional one. Of arithmetic necessity, this change was offset by change for other groups, but no change for an individual group was significant. Thus, the same general pattern as before continued to hold across the groups. This stability is particularly curious in light of the degree of movement of individual households across wealth groups noted earlier in this paper.[11]

[10] Estimates from surveys before the 1989 SCF are not strictly comparable; in addition, they are likely to have larger standard errors than those from later surveys, but the necessary information for estimating those standard errors is not available.

[11] Examination of the 1962–1963 panel as two cross sections shows a similarly stable pattern.

Table 5: Share of wealth owned by wealth percentile groups, 1962-2007.

Year	*Percentile group*			
	0-50	50-90	90-99	99-100
1962	3.9	32.1	32.2	31.8
1962p*	4.0	32.9	33.2	29.9
1963p*	4.4	33.1	32.6	29.9
1983	3.8	29.5	35.1	31.6
1989	3.0	29.9	37.1	30.1
	0.3	*1.8*	*2.8*	*2.3*
1992	3.3	29.7	36.9	30.1
	0.2	*1.1*	*1.4*	*1.4*
1995	**3.6**	28.6	**33.2**	**34.6**
	0.2	*0.7*	*1.0*	*1.3*
1998	**3.0**	28.4	34.7	33.9
	0.2	*0.9*	*1.3*	*1.5*
2001	2.8	27.4	**37.1**	32.6
	0.1	*0.7*	*1.3*	*1.4*
2004	**2.5**	27.9	36.2	33.4
	0.1	*0.9*	*1.2*	*1.2*
2007	2.5	**26.0**	37.7	33.8
	0.1	*0.6*	*1.1*	*1.3*
2007p*	2.5	25.7	38.5	33.3
	0.1	*0.6*	*0.7*	*0.7*
2009p*	**1.5**	26.2	39.3	33.3
	0.2	*0.7*	*0.9*	*1.1*

Note: Estimates presented in the shaded rows are not strictly comparable with estimates from the 1989–2007 cross-sectional SCFs. Standard errors are given in italics below the estimates for the surveys beginning with 1989. Standard errors are not available for estimates from the surveys before 1989. The estimates shown in bold are statistically significantly different from the corresponding estimate for the previous year; estimates that are underlined are significantly different from the corresponding estimate for 1989 and that for 1989.

* 1962p refers to the wealth shares only of the set of cases interviewed in both 1962 and 1963, reweighted to approximate the 1962 wealth distribution estimated from the entire set of survey participants; 1963p refers to the 1963 wealth shares of the same set of cases, estimated using these weights; 2007p and 2009p are comparably defined.

Another way to look at change over the two years of the panel is to use the groups defined in terms of 2007 wealth shares to compare wealth shares for the same sets of households in 2007 and 2009 (table 6). By 2009, the wealth share of the group that had included the wealthiest one percent of households had seen about a four percentage point decline in their share, while the shares of all the other groups rose.[12] The wealthiest one percent in 2007 experienced nearly half of the net losses in wealth over this period; the group also experienced, on net, about two-thirds of the losses in total household income. Overall, households in the least wealthy half of the distribution in 2007 saw gains in both wealth and income shares by 2009; because that group is fairly heterogeneous, however, this overall change obviously does not necessarily apply to all households in the group.

Table 6: Share of total 2007 and 2009 wealth and income and changes in those variables, by percentile group of 2007 wealth and of 2009 wealth.

2007 group	*NW07*	*NW09*	*DEL_NW*	*INC07*	*INC09*	*DEL_INC*
0-50	2.5	3.3	-0.9	23.0	28.4	-20.0
	0.1	*0.2*	*0.8*	*0.9*	*1.1*	*5.0*
50-90	25.7	27.6	17.7	35.3	41.5	3.1
	0.6	*0.7*	*2.6*	*2.0*	*1.8*	*6.6*
90-99	38.5	39.7	33.6	25.1	18.9	50.3
	0.7	*1.2*	*4.4*	*1.3*	*3.2*	*9.9*
99-100	*33.3*	*29.4*	*49.6*	*16.6*	*11.1*	*66.6*
	0.7	*1.3*	*4.3*	*1.1*	*1.3*	*10.2*
2009 group						
0-50	4.4	1.5	16.4	23.7	27.6	-6.9
	0.2	*0.2*	*2.0*	*0.8*	*1.1*	*3.4*
50-90	26.9	26.2	30.0	35.7	41.4	7.4
	0.6	*0.7*	*3.3*	*1.9*	*1.8*	*6.1*
90-99	39.7	39.3	41.4	23.4	18.6	34.1
	1.1	*0.9*	*5.2*	*1.3*	*3.3*	*8.4*
99-100	29.0	33.0	12.2	17.3	12.4	65.5
	1.0	*1.1*	*7.4*	*1.1*	*1.3*	*9.6*

Note: Standard errors are given in italics below each estimate.

[12] In contrast, the wealth shares observed for households that were included in both waves of the 1962–1963 panel changed relatively little (table).

Table: Share of total 1962 and 1963 wealth, but percentile group of 1962 wealth.

1962 group	*NW62*	*NW63*
0-50	4.0	4.7
50-90	32.9	33.0
90-99	33.2	33.1
99-100	29.9	29.2

As would be expected when households are classified by their 2009 wealth, the wealthiest one percent—those who remained in the group from 2007 plus the new entrants since then—had the smallest net share of the wealth losses over the period. In contrast, the group experienced, on net, only a somewhat smaller a share of the income losses over the period as the comparable group defined in terms of 2007 wealth.

Table 7: Share of total 2007 and 2009 wealth and income and changes in those variables, by percentile group of 2007 wealth and direction of change in 2009.

2007 group	2009 group	NW07	NW09	DEL_NW	INC07	INC09	DEL_INC
0-50							
	Same	1.8	1.1	4.8	19.2	23.2	-12.4
		0.1	*0.1*	*0.7*	*0.7*	*0.9*	*3.7*
	Up	0.7	2.2	-5.7	3.8	5.2	-7.6
		0.1	*0.2*	*0.8*	*0.3*	*0.4*	*2.5*
50-90							
	Lower	2.2	0.4	9.8	4.3	4.3	5.1
		0.2	*0.1*	*1.1*	*0.3*	*0.4*	*1.7*
	Same	21.1	21.8	17.9	28.7	34.4	1.7
		0.7	*0.6*	*2.4*	*1.9*	*1.6*	*6.0*
	Higher	2.4	5.4	-10.0	2.3	2.8	-3.7
		0.3	*0.4*	*1.6*	*0.3*	*0.5*	*2.3*
90-99							
	Lower	5.0	2.3	16.6	3.3	2.3	11.8
		0.4	*0.3*	*2.0*	*0.6*	*0.5*	*3.4*
	Same	30.6	30.8	29.6	19.1	14.4	32.3
		0.8	*1.0*	*3.3*	*1.2*	*3.3*	*7.9*
	Higher	2.8	6.5	-12.6	2.7	2.2	6.2
		0.6	*1.0*	*4.7*	*0.8*	*0.6*	*7.1*
99-100							
	Lower	7.2	3.0	24.5	2.0	0.9	7.3
		1.1	*0.7*	*4.1*	*0.6*	*1.0*	*5.4*
	Same	26.2	26.4	25.1	14.6	10.3	59.2
		1.3	*1.6*	*4.8*	*1.2*	*1.3*	*9.6*

Note: Standard errors are given in italics below each estimate.
"Lower" indicates households that fell by at least one wealth group from 2007 to 2009, "Same" indicates households that remained in the same wealth group in both years, and "Higher" indicates households that moved up by at least one wealth group from 2007 to 2009.

To clarify the dynamics over the period and to set the background for an analysis in the next section of the portfolio shifts that underlay the observed high-level wealth changes, table 7 breaks out the 2007 wealth groups into sub-groups defined in terms of whether they were in a lower wealth group in 2009, the same group, or a higher group. Households that remained in the same wealth group in both years had, on net, shares of the net losses of wealth roughly commensurate with their 2007 wealth shares; consequently, their 2009 shares remained about the same. Not surprisingly, those moving to a higher wealth group in 2009 had, on net, a negative share of the total losses (that is, they had a gain); because the wealth groups are a relative

classification, however, even within these groups, some households experienced losses.[13] Note that the largest share of the net losses in income—nearly 60 percent—is attributable to households that were among the wealthiest in both 2007 and 2009.

Forbes provides annual information on the group that they consider to be among the 400 wealthiest people in the U.S. (e.g., see the October 2010 issue of *Forbes*). If one accepts that this data source provides reliable coverage of the very top of the wealth distribution, then it can also be used to describe wealth dynamics among the wealthiest households over the period covered by the 2007–2009 SCF panel. Of those who were present in the *Forbes* list in 2007, 61 (15.3 percent) were no longer present in 2009 (11 of them had died) and, by construction, they were replaced by 61 new entrants since 2007. Of those present in both years, 83.8 percent saw a constant-dollar wealth decline. The overall median change was a decline of 16.6 percent, but among the group having a loss, the median decline was 24.9 percent. For those seeing gains, the median increase was 16.1 percent. The highest wealth value declined 18.2 percent, while the minimum value to qualify for the list fell 29.4 percent.

III. Underlying Changes in Portfolio Composition

Ownership of bonds, stocks, real estate other than a home, or a business is disproportionately likely among the wealthiest 10 percent of households, and particularly so among the wealthiest 1 percent (table 8). Across the 2007 wealth groups considered here, ownership of various portfolio elements shifted relatively little by 2009. The most noticeable shift was in the increased rate of ownership of certificates of deposit or bonds among the wealthiest households.

Breaking out ownership in 2007 by the 2007 wealth categories and the change groups used earlier reveals some interesting patterns (table 9). Among the least wealth 50 percent of households in 2007, those who rose into the next-wealthiest group tended to have more types of financial or nonfinancial assets and to be more likely to have debt in 2007, compared with those who remained in the same group in 2009; some of this difference seems likely to have been driven by differences in life cycle stage, but part of the group that saw no change consists of

[13] Among groups that rose by at least one wealth group in 2009, 7.0 percent of those in the lowest 50 percent of 2007 wealth had losses. The comparable figures were 7.4 percent for the next higher 40 percent and 11.2 percent for the next higher 9 percent. Roughly 60 to 75 percent of the groups that stayed in the same wealth group had a net loss. Of course, all of the groups that fell by at least one group had a net loss.

households that have few signs of long-term prospects of improvement (see Kennickell [2006]). For the other wealth groups, households that stayed in the same group or rose to a higher group in 2009 were also generally more likely to have a variety of assets, but less likely to have any debts overall.

Table 8: Ownership of portfolio elements in 2007 and in 2009, by 2007 wealth group; percent.

Portfolio Element	2007 wealth				2009 wealth							
	As % of 2007 assets				As % of 2009 assets				As % of 2009 assets			
	2007 wealth group				2007 wealth group				2009 wealth group			
	0-50	50-90	90-99	99-100	0-50	50-90	90-99	99-100	0-50	50-90	90-99	99-100
ASSET	96.2	100.0	100.0	100.0	96.2	99.9	100.0	100.0	96.2	100.0	100.0	100.0
FIN	89.0	99.6	100.0	99.9	90.1	98.9	100.0	100.0	89.5	99.6	99.9	100.0
LIQ	86.1	98.9	100.0	99.9	86.5	97.9	99.4	100.0	85.9	98.5	99.6	100.0
CDS	5.3	23.5	34.2	29.1	5.1	25.4	30.6	36.8	4.4	26.1	31.2	42.9
SAVBND	9.1	21.1	24.3	18.3	7.9	19.7	23.1	19.7	6.8	21.1	23.3	18.0
BOND	0.1	1.0	10.2	28.1	0.3	2.3	14.0	33.8	0.3	2.5	12.1	42.7
STOCKS	7.2	23.4	52.9	67.9	7.3	24.1	50.8	68.5	7.2	23.5	53.3	71.1
NMMF	2.4	15.2	42.0	52.5	2.5	13.8	39.7	49.3	2.5	13.5	40.4	56.3
RETQLIQ	36.7	71.3	87.1	89.0	38.8	70.1	87.1	88.3	36.5	72.9	86.6	91.4
CASHLI	13.7	30.9	38.5	57.7	14.7	32.1	39.2	55.5	13.1	34.0	40.3	52.9
OTHMA	1.1	8.2	17.0	28.4	1.3	8.7	15.4	22.7	1.3	8.0	18.4	22.3
OTHFIN	8.2	9.0	15.5	24.4	9.4	9.2	17.8	32.4	8.9	9.8	19.2	23.2
NFIN	85.8	99.4	100.0	100.0	86.3	98.7	99.7	100.0	85.9	99.2	99.8	100.0
VEHIC	82.2	93.5	94.4	92.1	81.7	91.8	92.9	92.0	81.3	92.2	92.9	93.6
HOUSES	43.5	93.8	96.7	97.7	47.3	92.6	96.3	99.2	46.6	93.3	97.0	98.3
ORESRE	4.6	17.3	44.1	66.2	4.4	16.3	40.1	65.4	4.0	16.2	42.6	63.8
NNRESRE	2.1	10.8	28.5	37.0	2.4	9.0	27.2	40.8	2.1	9.8	25.7	38.2
BUS	3.8	14.4	44.4	73.6	4.1	13.5	42.1	69.9	3.9	14.0	40.2	74.3
OTHNFIN	4.5	8.0	17.8	34.4	6.0	10.6	17.8	35.1	5.1	11.5	19.9	25.9
DEBT	78.7	81.4	78.8	67.4	78.5	77.9	70.7	66.6	78.3	78.2	70.8	66.4
MRTHEL	34.7	66.5	64.7	51.9	36.3	63.5	59.1	51.7	36.5	63.5	57.6	57.8
RESDBT	2.2	6.3	19.5	31.3	1.9	5.9	16.5	27.0	2.2	5.9	16.2	17.2
INSTALL	55.8	44.5	30.2	18.9	58.3	44.3	27.1	18.2	57.8	45.8	23.4	13.4
OTHLOC	2.0	1.6	1.3	4.5	2.7	3.3	4.0	7.5	3.1	3.0	3.6	3.7
CCBAL	49.5	50.0	31.4	18.8	46.1	43.9	26.0	17.9	46.1	44.3	25.4	12.8
ODEBT	8.2	6.2	8.0	12.4	7.2	6.4	5.3	7.8	7.5	6.1	5.0	5.2
Memo: EQUITY	32.1	71.2	90.7	95.6	37.1	70.8	90.5	93.4	35.3	72.9	90.7	95.0

Table 9: Ownership of portfolio elements in 2007, by 2007 wealth group and direction of change in 2009; percent.

Portfolio element	*2007 wealth group/change in 2009*									
	0-50		*50-90*			*90-99*			*99-100*	
	Same	*Higher*	*Lower*	*Same*	*Higher*	*Lower*	*Same*	*Higher*	*Lower*	*Same*
ASSET	95.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
FIN	87.8	97.8	98.1	99.9	100.0	100.0	100.0	99.8	99.9	100.0
LIQ	84.6	97.2	97.6	99.2	97.5	100.0	100.0	99.8	99.8	99.9
CDS	4.8	8.9	9.9	25.6	29.0	29.4	34.6	55.3	27.7	29.7
SAVBND	8.2	16.3	14.8	21.9	25.5	29.6	23.0	16.3	16.6	19.1
BOND	0.2	0.0	0.0	1.1	1.9	6.6	10.6	26.1	25.0	29.6
STOCKS	6.8	10.5	16.8	23.4	41.9	41.8	54.8	84.4	64.1	69.8
NMMF	1.9	5.6	5.3	16.1	27.8	30.5	45.2	51.2	45.9	55.8
RETQLIQ	34.7	51.6	54.0	74.2	75.7	77.9	89.6	97.2	81.2	92.8
CASHLI	12.3	23.6	26.5	31.2	38.9	31.4	40.3	48.3	64.1	54.5
OTHMA	0.9	2.7	3.2	8.9	9.7	9.3	19.0	27.3	31.2	26.9
OTHFIN	8.2	8.4	12.3	8.5	6.6	12.9	16.6	12.3	30.7	21.3
NFIN	84.4	96.6	99.3	99.4	100.0	100.0	100.0	100.0	100.0	100.0
VEHIC	80.9	92.3	92.3	93.6	95.4	92.9	94.7	98.2	94.8	90.8
HOUSES	39.9	70.3	88.3	94.7	95.1	95.7	97.0	96.1	98.9	97.1
ORESRE	4.1	8.0	17.2	16.9	24.2	46.8	42.5	58.9	64.7	67.0
NNRESRE	1.6	6.0	9.9	10.9	12.2	29.1	28.6	22.4	47.0	32.1
BUS	3.2	8.4	16.3	13.0	29.7	42.2	44.3	60.2	65.9	77.4
OTHNFIN	4.2	6.5	10.1	7.4	10.7	19.1	17.7	11.6	37.7	32.8
DEBT	77.1	90.2	87.8	80.5	78.0	82.9	77.5	79.7	73.9	64.3
MRTHEL	31.2	61.1	72.9	65.8	60.9	68.8	62.9	74.3	57.1	49.3
RESDBT	2.0	3.3	10.6	5.6	4.9	19.8	19.4	20.3	41.9	26.0
INSTALL	55.6	56.6	43.9	45.2	35.7	41.0	27.7	12.4	31.5	12.7
OTHLOC	1.8	3.4	4.2	1.2	0.2	0.9	1.4	1.0	7.8	2.9
CCBAL	48.0	61.3	59.6	48.1	51.8	52.4	25.5	14.5	16.5	19.9
ODEBT	8.3	7.0	5.7	6.5	3.0	10.0	7.5	4.4	22.9	7.3
Memo: EQUITY	30.2	47.0	51.3	74.0	82.2	85.3	92.1	98.0	93.7	96.5

Table 10: Portfolio elements in 2007 and 2009 as a share of total, by 2007 or 2009 wealth group; percent.

Portfolio Element	2007 wealth				2009 wealth							
	As % of 2007 portfolio elements				As % of 2009 portfolio elements				As % of 2009 portfolio elements			
	By 2007 wealth group				By 2007 wealth group				By 2009 wealth group			
	0-50	50-90	90-99	99-100	0-50	50-90	90-99	99-100	0-50	50-90	90-99	99-100
ASSET	6.2	28.7	35.9	29.2	8.0	30.8	36.0	25.2	8.5	29.4	36.6	25.4
FIN	2.7	25.2	42.2	29.9	4.3	28.1	40.0	27.6	3.8	27.2	41.6	27.4
LIQ	6.6	32.5	37.5	23.4	7.0	30.7	37.4	24.9	7.8	32.9	37	22.4
CDS	2.8	44.1	38.7	14.5	3.3	40.5	35.0	21.2	4.9	42.7	34.7	17.8
SAVBND	5.5	54.8	31.9	7.7	5.7	45.1	33.6	15.6	10.8	48.2	34.3	6.6
BOND	0.0	2.1	30.6	67.3	0.0	1.4	35.1	63.5	0.0	3.9	32.1	64.0
STOCKS	0.6	9.4	40.5	49.5	2.0	11.2	40.7	46.0	1.3	15.8	38.2	44.7
NMMF	0.4	12.1	45.3	42.2	1.2	14.3	44.0	40.6	0.5	15.2	43.5	40.8
RETQLIQ	3.8	35.7	46.3	14.1	5.9	40.2	42.0	11.9	4.7	37.1	46.3	11.8
CASHLI	6.3	44.4	28.2	21.1	9.5	42.2	29.2	19.1	13.8	37.5	28.8	19.8
OTHMA	0.9	18.6	41.0	39.5	1.2	22.2	39.4	37.2	1.1	19.8	42.2	36.8
OTHFIN	4.4	25.8	37.9	31.9	7.3	20.2	39.4	33.1	9.4	26.3	42.5	21.8
NFIN	8.1	30.6	32.4	28.9	10.0	32.3	33.8	23.9	11.1	30.6	33.9	24.3
VEHIC	29.3	46.0	18.1	6.5	28.6	47.1	18.0	6.3	30.0	45.6	18.3	6.1
HOUSES	13.2	48.3	29.1	9.3	15.8	47.7	27.8	8.7	16.7	46.2	28.8	8.3
ORESRE	2.8	24.4	48.3	24.5	3.3	28.5	46.5	21.7	8.3	24.8	46.6	20.3
NNRESRE	1.2	15.6	45.8	37.5	1.4	16.9	46.8	35.0	3.0	17.8	48.2	30.9
BUS	0.3	5.9	31.6	62.2	1.5	8.4	39.2	50.9	2.1	8.9	37.2	51.8
OTHNFIN	4.0	24.2	31.2	40.5	6.6	21.8	29.5	42.1	10.9	23.5	29.6	36.0
DEBT	27.9	46.1	20.6	5.5	29.5	45.4	19.2	5.9	32.6	43.9	19.0	4.6
MRTHEL	26.4	49.5	19.9	4.1	28.6	49.1	18.4	4.0	31.1	47.1	18.0	3.9
RESDBT	7.6	34.7	42.8	14.9	5.0	36.9	40.2	17.8	20.8	28.3	40.5	10.3
INSTALL	52.8	35.0	8.0	4.1	55.1	33.3	8.0	3.6	51.6	36.4	8.7	3.3
OTHLOC	9.8	37.8	14.8	37.5	12.4	16.4	23.3	48.0	27.9	24.2	26.7	21.3
CCBAL	43.7	45.0	10.2	1.2	40.1	47.2	11.4	1.3	43.7	46.3	9.1	0.9
ODEBT	27.5	21.6	26.2	24.6	23.1	23.6	26.6	26.7	25.4	32.4	26.2	15.9
Memo: EQUITY	1.6	20.7	44.7	33.1	3.6	25.3	41.9	29.2	2.3	24.3	43.0	30.4

The distribution of holdings of assets is somewhat less concentrated than that of wealth, according to the classifications used here (table 10). Thus, of logical necessity, debt must be distributed differently than assets; the greater concentration of debt among households with wealth between the 50th and 90th percentiles drives most of this difference. Although the wealthiest group holds debt in an amount out of proportion to its size, it is far less of a disproportion than the case for assets. For the least wealthy half of households, the only portfolio elements that approximate their population share are credit card debt and installment debt. Comparable results hold regardless of whether we consider households classified by their 2007 or 2009 wealth group or whether we consider the relationship in terms of 2007 or 2009 wealth.

Nearly all bonds owned directly by households (other than savings bonds) are held by the wealthiest 10 percent of households, and almost two-thirds of the total belongs to the wealthiest one percent.[14] Holdings of directly owned stocks are also strongly tilted toward the top of the distribution, but a measure including stock equity held in other forms is far less concentrated.[15] Private business assets are strongly concentrated among the wealthiest 10 percent; in 2007 over 60 percent of the total was owned by the wealthiest one percent. Approximately three-quarters of the gross value of principal residences is owned by the upper half of the wealth distribution; given the disproportionate holding of mortgages among the least wealth half, the distribution of equity in principal residences is even more skewed toward the upper half (not shown in the table). Other holdings of real estate are more concentrated among the wealthiest 10 percent.

For wealth groups defined in terms of their 2007 levels, gross assets declined by 2009 as a share of their 2007 assets, for all except the least wealthy 50 percent, for which gross assets rose by about seven percent (table 11). For that group both financial and nonfinancial assets increased, but financial assets rose more, largely as a result of an increase in retirement accounts; leverage (the ratio of debts to assets) also rose for this group as a result of higher mortgage and installment borrowing.

The portfolio share of principal residences fell substantially for the group between the 50th and 90th percentiles of 2007 wealth, but business wealth fell by a much larger percentage

[14] In this paper, direct ownership of bonds or stocks is taken to include such assets not held through a mutual fund or any type of managed account or pension.

[15] Including a measure of stocks owned by defined-benefit pension plans in the interest of beneficiaries might also be sufficient to shift the ownership shares noticeably.

than such housing for the wealthiest one percent. The portfolio share of corporate equity held in any type of investment also fell sharply for the wealthiest group. Although leverage shifted little overall or for any of the groups except the least wealthy relative to 2007 assets, leverage defined in terms of 2009 assets increased for all except the wealthiest one percent, largely reflecting the devaluation of assets in 2009. Yet despite all these changes, it is remarkable how similar the distributions of asset shares are for the baseline 2007 elements arrayed by 2007 wealth and the resulting 2009 elements arrayed 2009 wealth.

Table 11: Portfolio elements in 2007 and 2009 as a share of assets for 2007 or 2009, by 2007 or 2009 wealth group; percent.

Portfolio element	2007 wealth					2009 wealth									
	As a percent of 2007 assets					As a percent of 2007 assets					As a percent of 2009 assets				
	2007 wealth group					2007 wealth group					2009 wealth group				
	All	0-50	50-90	90-99	99-100	All	0-50	50-90	90-99	99-100	All	0-50	50-90	90-99	99-100
ASSET	100.0	100.0	100.0	100.0	100.0	83.7	107.3	89.8	84.1	72.3	100.0	100.0	100.0	100.0	100.0
FIN	35.2	15.6	30.9	41.5	36.0	29.7	20.5	29.0	33.2	28.1	35.5	15.3	31.3	40.8	38.2
LIQ	3.5	3.7	4.0	3.7	2.8	3.8	4.2	4.0	3.9	3.2	4.5	3.5	4.4	4.7	4.6
CDS	1.3	0.6	1.9	1.4	0.6	1.5	0.8	2.1	1.5	1.1	1.8	0.6	2.4	1.7	1.6
SAVBND	0.2	0.1	0.3	0.1	0.0	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.2	0.2	0.1
BOND	1.4	0.0	0.1	1.2	3.2	1.8	0.0	0.1	1.8	4.0	2.2	0.0	0.1	1.9	5.3
STOCKS	6.4	0.6	2.1	7.2	10.8	4.0	1.3	1.6	4.6	6.4	4.8	0.5	1.6	5.4	8.6
NMMF	5.3	0.3	2.2	6.7	7.7	3.5	0.6	1.7	4.3	4.8	4.1	0.3	1.7	4.8	6.9
RETQLIQ	13.3	8.2	16.5	17.2	6.4	11.4	10.8	15.9	13.3	4.6	13.6	8.4	17.4	17.7	5.6
CASHLI	1.1	1.1	1.7	0.9	0.8	0.9	1.4	1.4	0.8	0.6	1.1	0.8	1.6	1.0	0.8
OTHMA	2.0	0.3	1.3	2.3	2.7	2.0	0.4	1.5	2.2	2.5	2.4	0.4	1.5	2.4	3.9
OTHFIN	0.8	0.5	0.7	0.8	0.8	0.7	0.8	0.5	0.8	0.8	0.8	0.6	0.4	1.2	0.9
NFIN	64.8	84.4	69.1	58.5	64.0	54.0	86.7	60.8	51.0	44.2	64.5	84.7	68.7	59.2	61.8
VEHIC	2.9	13.6	4.6	1.5	0.6	2.5	11.5	4.1	1.3	0.5	3.0	11.2	4.9	1.6	0.7
HOUSES	30.9	65.7	52.0	25.0	9.9	26.2	66.6	43.5	20.3	7.8	31.3	68.2	51.0	24.8	9.5
ORESRE	6.7	3.0	5.7	9.0	5.6	6.3	3.3	6.2	8.2	4.7	7.5	3.6	6.0	10.4	6.4
NNRESRE	4.0	0.7	2.2	5.1	5.1	3.1	0.7	1.8	4.0	3.7	3.7	0.3	2.0	4.9	4.5
BUS	19.5	0.9	4.0	17.2	41.6	15.1	3.6	4.4	16.5	26.3	18.0	0.9	4.0	16.4	39.2
OTHNFIN	0.8	0.6	0.7	0.7	1.2	0.9	1.0	0.7	0.7	1.3	1.1	0.6	0.8	1.1	1.5
DEBT	14.7	66.0	23.6	8.4	2.7	14.9	70.7	23.5	8.0	3.0	17.8	82.7	26.2	9.6	2.8
MRTHEL	11.0	46.9	19.0	6.1	1.6	10.8	49.9	18.5	5.6	1.5	13.0	58.0	20.8	6.3	1.7
RESDBT	1.4	1.7	1.7	1.7	0.7	1.5	1.2	1.9	1.7	0.9	1.8	3.1	2.0	2.3	0.5
INSTALL	1.5	12.8	1.8	0.3	0.2	1.7	15.5	2.0	0.4	0.2	2.1	16.6	2.3	0.4	0.2
OTHLOC	0.1	0.1	0.1	0.0	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.3	0.1	0.2	0.1
CCBAL	0.5	3.7	0.8	0.1	0.0	0.5	3.3	0.9	0.2	0.0	0.6	4.1	0.8	0.2	0.0
ODEBT	0.2	0.8	0.1	0.1	0.2	0.2	0.6	0.1	0.1	0.2	0.2	0.7	0.1	0.2	0.2
*Memo:*EQUITY	17.8	4.6	12.8	22.2	20.2	12.6	7.4	11.1	14.7	12.6	15.0	5.3	11.9	17.9	17.1

For all the wealth groups, changes in the value of private business holdings were an important factor in explaining the movement of households between groups (tables 12 and 13). While some households were invested in businesses that were hard hit, such as construction businesses, others apparently had an existing business model or implemented a new one that was attuned to the economic conditions. The decline in business holdings for the wealthiest one percent was, by far, the largest factor in explaining the movement of a subgroup of those households to a lower group in 2009; households that remained in the wealthiest group also lost business wealth, but a much smaller amount. Both the subgroup that remained in the top group

and the subgroup that fell had started in 2007 with nearly the same fraction of their assets invested in private businesses. Movements for the corresponding subgroups in the next-most-wealthy group were similar, and gains in business wealth were a particularly large factor in explaining the rise of one subgroup to the wealthiest one percent in 2009. For the other wealth groups, mobility across groups was also driven to some extent by as a result of such shifts in business values, but other factors were more important for them overall.

The value of holdings of principal residences in 2009 fell or barely changed relative to 2007 assets for all of the wealth groups except for the subgroup of households in the lower half of the distribution in 2007 who moved to a higher group in 2009. For that subgroup, housing wealth rose by about half; this increase seems likely to reflect expected life-cycle patterns in homeownership. For households outside the ten percent wealthiest, declines in housing wealth were particularly large for those who stayed in the same wealth group or moved to a lower group, accounting for well over 40 percent of their overall changes in wealth.

Changes in holdings of financial asset holdings were substantial, but about half as important in explaining the wealth decline as changes in holdings of nonfinancial assets. There were large shifts in holdings for particular types of financial assets for some groups. Retirement assets increased markedly for households up to the 90th percentile that rose to a higher wealth group in 2009; such assets decreased for households that fell by at least one group or stayed in the same group. Declines associated with directly held stocks were concentrated among the wealthiest ten percent, but using the broader measure of stocks that includes indirect holdings through retirement accounts or any other type of managed account shows that there were strong effects throughout the wealth distribution. Overall, declines in any such stock holdings accounted for most of the net decline in financial wealth; gains in such stock holdings were particularly important for households below the 90th percentile that rose to a higher wealth group in 2009.

Changes in debt holdings were relatively modest for all of the wealth groups considered except for the least wealthy half of the population. The largest change for the subgroup that remained in this group was a rise in the use of installment debt. For the subgroup that rose to a higher group in 2009, mortgage debt was the dominant factor.

Table 12: Portfolio elements in 2007 or 2009 as a share of 2007 assets, by wealth percentile group in 2007 and direction of change in 2009; percent.

Portfolio element	***Value of 2007 portfolio elements as a share of 2007 wealth***									
	2007 wealth group/change in 2009									
	0-50		*50-90*			*90-99*			*99-100*	
	Same	*Higher*	*Lower*	*Same*	*Higher*	*Lower*	*Same*	*Higher*	*Lower*	*Same*
ASSET	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
FIN	14.8	18.4	18.0	32.0	37.6	37.5	42.2	41.1	30.2	37.6
LIQ	3.6	4.2	2.8	4.0	4.8	3.3	3.7	3.8	2.0	3.0
CDS	0.6	0.6	1.0	2.1	1.7	1.0	1.3	2.7	0.4	0.7
SAVBND	0.1	0.1	0.3	0.3	0.4	0.1	0.1	0.0	0.0	0.0
BOND	0.0	0.0	0.0	0.1	0.2	0.5	1.3	1.0	1.1	3.8
STOCKS	0.6	0.7	1.6	2.0	3.8	8.9	6.9	7.8	7.9	11.6
NMMF	0.3	0.4	0.4	2.4	3.1	5.0	6.9	8.7	4.7	8.6
RETQLIQ	7.7	10.1	7.5	17.5	19.3	15.3	17.9	12.4	9.8	5.5
CASHLI	1.1	1.3	3.0	1.5	2.2	1.1	0.8	0.9	0.6	0.9
OTHMA	0.1	0.8	0.5	1.4	1.7	1.4	2.4	3.2	2.2	2.9
OTHFIN	0.6	0.2	0.7	0.7	0.4	1.0	0.8	0.7	1.5	0.7
NFIN	85.2	81.6	82.0	68.0	62.4	62.5	57.8	58.9	69.8	62.4
VEHIC	14.2	11.0	4.9	4.7	3.3	1.7	1.5	0.9	0.6	0.7
HOUSES	66.1	64.3	56.9	52.3	41.9	28.0	24.9	20.9	13.5	8.9
ORESRE	3.0	2.9	10.4	5.0	5.8	10.0	8.8	8.8	7.9	4.9
NNRESRE	0.5	1.5	2.3	2.1	3.0	4.5	5.2	4.8	6.1	4.9
BUS	0.8	1.3	5.5	3.4	7.8	17.0	16.7	23.1	40.9	41.8
OTHNFIN	0.6	0.5	2.0	0.5	0.6	1.3	0.7	0.5	0.8	1.3
DEBT	68.7	55.8	41.2	22.0	14.5	13.6	7.7	6.8	4.9	2.2
MRTHEL	48.5	40.6	30.7	18.1	12.1	10.5	5.4	5.2	2.5	1.3
RESDBT	1.8	1.3	5.6	1.2	0.9	1.9	1.7	1.3	1.5	0.5
INSTALL	13.6	10.0	3.3	1.7	1.0	0.5	0.3	0.1	0.2	0.2
OTHLOC	0.1	0.1	0.3	0.1	0.0	0.1	0.0	0.0	0.2	0.1
CCBAL	3.8	3.2	1.2	0.8	0.5	0.4	0.1	0.0	0.0	0.0
ODEBT	0.8	0.7	0.1	0.1	0.0	0.2	0.1	0.2	0.3	0.1
Memo: EQUITY	4.4	5.5	5.8	13.5	15.8	21.1	22.4	21.9	16.2	21.3
	Value of 2009 portfolio elements as a share of 2007 wealth									
ASSET	88.7	177.7	49.4	87.3	167.7	42.6	82.7	179.5	38.4	81.8
FIN	14.4	43.8	6.3	28.2	68.1	12.5	34.5	58.0	12.3	32.5
LIQ	3.5	7.1	1.2	3.9	9.1	1.9	3.9	8.3	1.2	3.8
CDS	0.5	1.7	0.2	2.2	3.3	0.7	1.5	2.8	0.3	1.3
SAVBND	0.1	0.3	0.1	0.2	0.3	0.1	0.1	0.1	0.0	0.1
BOND	0.0	0.0	0.0	0.1	0.1	0.1	1.8	4.4	0.5	5.0
STOCKS	0.3	5.1	0.3	1.3	6.1	0.9	4.7	10.3	1.7	7.7
NMMF	0.3	1.9	0.2	1.5	6.0	0.9	4.3	10.2	1.0	5.9
RETQLIQ	7.9	21.5	3.5	15.8	33.8	7.0	14.5	12.5	6.0	4.3
CASHLI	0.8	3.7	0.2	1.4	2.8	0.5	0.8	1.0	0.4	0.7
OTHMA	0.3	0.8	0.3	1.4	4.1	0.2	2.0	7.9	0.6	3.1
OTHFIN	0.6	1.6	0.2	0.3	2.6	0.1	0.9	0.6	0.6	0.9
NFIN	74.3	134.0	43.1	59.2	99.6	30.1	48.2	121.5	26.1	49.3
VEHIC	11.4	11.9	3.5	4.3	3.2	1.3	1.3	1.0	0.4	0.6
HOUSES	59.4	94.2	35.2	44.8	42.3	19.1	20.6	19.9	8.8	7.5
ORESRE	1.8	9.1	3.9	4.9	22.6	4.3	8.1	16.2	5.2	4.5
NNRESRE	0.3	2.2	0.1	1.6	6.0	2.1	4.2	4.8	2.0	4.1
BUS	0.9	14.1	0.2	3.0	23.6	3.0	13.1	79.1	8.9	31.1
OTHNFIN	0.5	2.6	0.2	0.6	1.8	0.2	0.8	0.6	0.7	1.5
DEBT	73.3	61.1	40.4	22.1	14.1	11.1	7.6	6.4	6.1	2.1
MRTHEL	50.4	48.0	29.7	17.8	10.6	8.2	5.2	4.9	2.7	1.2
RESDBT	1.1	1.6	4.0	1.6	1.6	1.7	1.7	1.0	2.6	0.4
INSTALL	17.2	8.7	4.3	1.8	1.1	0.8	0.3	0.2	0.2	0.2
OTHLOC	0.3	0.1	0.0	0.1	0.1	0.2	0.1	0.1	0.4	0.1
CCBAL	3.6	2.2	2.1	0.7	0.5	0.2	0.2	0.1	0.0	0.0
ODEBT	0.7	0.5	0.3	0.1	0.1	0.0	0.1	0.2	0.1	0.2
Memo: EQUITY	4.9	16.9	2.4	10.7	26.4	5.0	15.3	26.5	5.7	14.5

Table 13: Change in value of portfolio elements from 2007 to 2009 as a fraction of the absolute value of total wealth change from 2007 to 2009, by 2007 wealth group and direction of change in 2009; percent.

Portfolio element	*All*	*2007 wealth group/change in 2009*									
		0-50		*50-90*			*90-99*			*99-100*	
		Same	*Higher*	*Lower*	*Same*	*Higher*	*Lower*	*Same*	*Higher*	*Lower*	*Same*
ASSET	-98.8	-71.1	107.3	-101.7	-99.1	99.4	-104.5	-100.6	99.5	-98.1	-100.2
FIN	-33.5	-2.4	35.0	-23.5	-29.9	44.9	-45.5	-44.6	21.2	-28.6	-28.0
LIQ	1.6	-0.9	4.0	-3.2	-1.1	6.2	-2.6	1.0	5.7	-1.3	4.1
CDS	1.4	-0.1	1.6	-1.6	1.3	2.3	-0.5	1.0	0.1	-0.3	3.6
SAVBND	-0.1	-0.4	0.3	-0.5	-0.5	-0.1	-0.1	0.0	0.1	0.0	0.3
BOND	2.6	0.0	0.0	0.0	-0.1	-0.1	-0.7	2.9	4.2	-1.1	6.2
STOCKS	-14.2	-1.8	6.1	-2.6	-5.4	3.4	-14.5	-12.5	3.2	-9.8	-21.8
NMMF	-11.3	-0.2	2.2	-0.5	-7.2	4.3	-7.5	-15.0	2.0	-5.8	-14.8
RETQLIQ	-11.7	1.6	15.8	-8.0	-13.6	21.3	-15.0	-20.0	0.1	-6.0	-6.6
CASHLI	-1.1	-1.7	3.4	-5.6	-0.7	0.8	-1.0	-0.3	0.1	-0.3	-1.1
OTHMA	-0.2	1.1	-0.1	-0.4	0.4	3.6	-2.0	-2.3	5.9	-2.5	0.9
OTHFIN	-0.4	0.0	1.8	-1.2	-3.1	3.2	-1.6	0.7	-0.1	-1.5	1.1
NFIN	-65.4	-68.7	72.3	-78.2	-69.2	54.6	-59.0	-56.0	78.3	-69.5	-72.1
VEHIC	-2.3	-17.7	1.1	-2.8	-3.3	-0.1	-0.7	-1.1	0.1	-0.2	-0.5
HOUSES	-28.3	-42.1	41.2	-43.6	-58.6	0.5	-16.2	-24.8	-1.3	-7.4	-7.6
ORESRE	-2.3	-7.3	8.5	-13.1	-0.9	24.7	-10.3	-4.3	9.2	-4.3	-2.4
NNRESRE	-5.7	-1.6	0.9	-4.5	-3.7	4.4	-4.4	-5.8	0.0	-6.4	-4.2
BUS	-27.2	0.4	17.7	-10.7	-3.5	23.2	-25.4	-21.2	70.1	-51.1	-58.5
OTHNFIN	0.4	-0.2	2.9	-3.5	0.7	1.8	-2.0	1.1	0.1	-0.1	1.0
DEBT*	-1.2	-28.9	-7.3	1.7	-0.9	0.6	4.5	0.6	0.5	-1.9	0.2
MRTHEL	1.0	-11.4	-10.2	2.1	2.1	2.1	4.2	1.6	0.4	-0.2	0.7
RESDBT	-0.5	4.5	-0.4	3.2	-3.2	-1.0	0.4	-0.3	0.4	-1.8	0.4
INSTALL	-1.4	-22.8	1.7	-2.0	-0.6	-0.2	-0.5	0.0	-0.2	0.1	-0.1
OTHLOC	-0.4	-1.0	-0.1	0.6	-0.1	-0.2	-0.2	-0.2	-0.1	-0.4	-0.4
CCBAL	0.0	0.9	1.3	-1.8	0.6	-0.1	0.3	-0.3	0.0	0.0	0.0
ODEBT	0.1	0.9	0.4	-0.4	0.2	-0.1	0.3	-0.2	0.1	0.4	-0.4
Memo:											
EQUITY	-31.8	3.0	15.7	-7.0	-21.8	15.6	-29.3	-41.2	5.8	-16.7	-37.3
Sign of wealth change	-	-	+	-	-	+	-	-	+	-	-

* Note: In this table, debt values are treated as negative numbers. Thus, because the shares are taken relative to the absolute value of overall change for each group, a negative percent contribution by a debt category indicates that an increase in debt contributed to a decline in wealth or served as an offset for groups that saw an overall increase in wealth. Similarly, a positive such percent indicates a contribution to a wealth increase or a mitigation of a decline.

Variable Definitions: Tables 8–13

Net Worth, Assets and Debts

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, and hedge 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).*

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

IV. Conclusion

Data from the 2007–2009 SCF panel confirm the large wealth drop observed in the aggregate data, but they also reveal a more complicated pattern of gains as well as losses across households. Yet despite the turmoil observed, the data show that the relative distribution of wealth for the panel in 2009 remained very close overall to that in 2007. Only one change was statistically significant: The share of wealth held by the lower half of the wealth distribution for the panel population in each year declined by a percentage point—a small absolute amount, but a very large proportional change from 2.5 percent in 2007. This change was offset so widely elsewhere in the distribution that no other change was significant for the wealth groups examined.

Reflecting the high degree of mobility across the wealth distribution over the 2007–2009 period, the picture is quite different when change is considered for panel households conditional on their position in the wealth distribution in 2007. For example, about 12 percent of the least wealthy half of households in 2007 moved into the upper half in 2009, and about half of the total net wealth loss was attributable to households originally among the wealthiest one percent in 2007.

Changes in three portfolio elements explain most of the observed changes: real estate, businesses and stock equity. Roughly speaking, personal business wealth, holdings of real estate other than principal residences, and stock equity are relatively concentrated at the top of the wealth distribution, whereas principal residences are a much larger fraction of wealth for other households. To a large degree, movements in these items were offsetting in their effects on the cross-sectional relative distribution of wealth, even while there were many large movements within the distribution for individual households.

Undoubtedly, some of the change observed in the SCF panel is attributable to noise in the measurement process. Variations the in composition of panel households between 2007 and 2009 may be one such factor. Although there is no unambiguous way to control for such changes, given the available data, it appears that the broad conclusions of this paper are not seriously affected by such shifts. Errors in reporting, recording or process the answers to the underlying survey questions are another potential source of error. Although it is unrealistic to expect this approach to be perfectly successful, it does appear that the measurements of overall

change in the panel correspond reasonably well to external estimates, where such comparisons can be made.

One limitation of this paper is that it effectively treats the least wealthy half of the population as if it were one homogeneous group. For purposes of examining overall wealth dynamics, the great skewness in the wealth distribution makes considerable aggregation of poorer households a necessity, but it disguises a great deal of important variation within this large group. Subsequent work will examine this group in more detail.

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Appendix

Table A1: Values associated with various percentile points of the distribution of wealth, 1963–2007; thousands of 2009 dollars.

Year	*Percentile*		
	50	*90*	*99*
1962	46.1	276.4	1634.4
1962p	46.1	275.2	1634.4
1963p	46.3	275.7	1516.4
1983	70.1	440.9	2811.4
1989	78.2	605.8	3752.6
1992	74.2	535.3	3473.0
1995	81.0	533.6	3443.5
1998	94.5	651.6	5001.1
2001	104.9	896.5	7009.6
2004	105.9	948.5	7229.2
2007	124.8	944.5	8657.5
2007p	125.4	944.5	9015.8
2009p	96.0	823.7	6917.0