

Joint Center for Housing Studies

Harvard University

**Housing Wealth and
Household Net Wealth in the United States:**
A New Profile Based on the Recently Released 2001 SCF Data

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Introduction

Household wealth in the United States has been growing since World War II and has accelerated in the past two decades. As in the 1980s, household wealth increased the most for the upper wealth quintile and least for the bottom quintile in the 1990s, making the gap between the rich and the poor even wider. Despite the 2001 drop in stock market values, the net worth of most American households remained steady largely due to strong house price appreciation that offset some of the stock-related losses.

This paper explores the importance of housing wealth in three ways. First, it looks at housing wealth as a share of household net wealth. Figures from 2001 reveal that housing is central to household wealth even though over-estimation of stock wealth by the SCF in that year understates housing's actual contribution. Second, it examines how housing wealth has helped temper the disparity in household wealth between rich and poor Americans. Third, it discusses the recent performance of the housing market and its role in stabilizing household wealth during the 2001 recession and stock market decline.

Data Sources

The main data for this paper comes from the 2001 Survey of Consumer Finances (SCF), released by the Federal Reserve Board at the end of February, 2003. The Federal Reserve provides another set of time series data on aggregate but not individual household wealth in the Flow of Funds Accounts (FFA). Due to differing methodology used in collecting these two data sets, large discrepancies have always existed. Efforts by the Federal Reserve have not yet been able to reconcile the two. In each survey year between 1989 and 1998, the SCF produced significantly lower estimates of aggregate household net wealth than the FFA. In 2001, however, the SCF produced a *higher* estimate (see Figure 1).

Figure 1

Comparison of SCF vs. FFA Estimates

In trillions of 2001\$

	1989	1992	1995	1998	2001
FFA Net Wealth of Households + Non-Profit	27.76	28.30	31.85	40.53	41.08
FFA Net Wealth of Households	26.10	26.62	31.03	38.00	
SCF Net Wealth	24.30	22.11	24.31	31.55	42.08
SCF Home Equity	6.43	5.63	5.49	6.51	8.69
FFA Home Equity	5.82	5.27	5.36	5.85	7.12

Closer examination reveals that gross overestimation of stock wealth by the respondents to the SCF 2001 contributes the most to such a reversal. There are two reasons to reach this conclusion. The first is that the SCF and FFA have produced similar estimates of the levels of home equity every survey year since 1989. Between 1998 and 2001, the SCF produced only a slightly higher estimate of the growth in home equity than the FFA. Yet the SCF produced an estimate of growth in total household net wealth over the period of about \$10 trillion. Thus, the reason for the reversal had little to do with home equity estimates. Second, aggregate stock wealth estimates of the SCF increased by \$3.2 trillion, a 40 percent jump, while broad measures of stock price movements show a much less dramatic growth in stock values between 1998 and 2001. Even taking into account the 3 percent increase in the number of stock owning households between 1998 and 2001 and the additional capital that flowed into the stock market during these booming times, it is clear the SCF dramatically overstated household stock wealth. Specifically, the DJIA closing points between September 1998 and September 2001 (the middle points of data collection in the 1998 and 2001 SCF surveys) show only a 12.8 percent growth. If we hold the estimated growth of stock wealth in SCF data at the same level, then \$2.2 out of the \$3.2 trillion of the SCF estimated stock wealth growth comes from respondents' over-estimation of their stock wealth. Thus, all the estimates below of housing's central role in household wealth are surely understated.

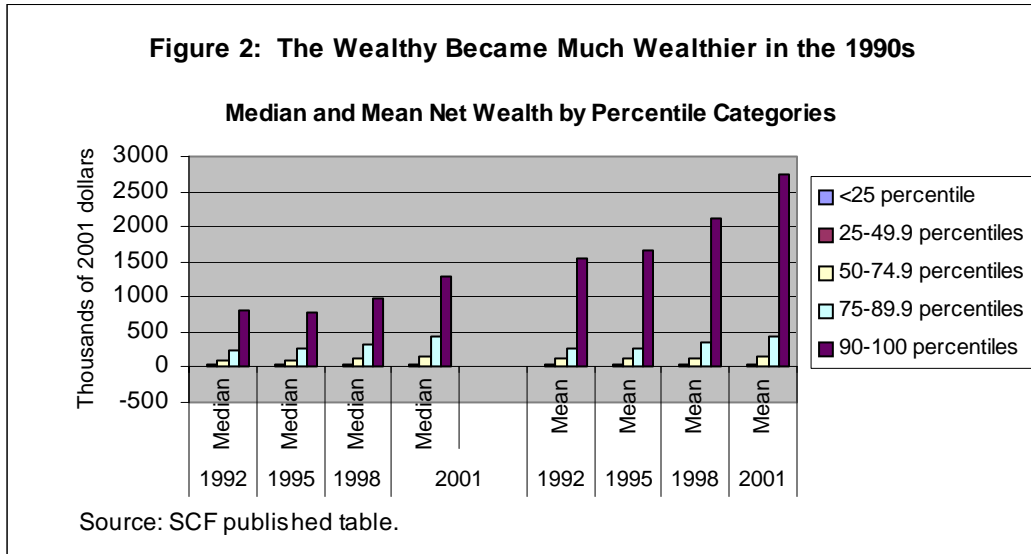
Despite the problems with the stock estimates in 2001, most researchers agree that SCF is the best data available to provide household-specific profiles on the distribution of wealth in the United States since it captures more aspects of household wealth than any other survey currently available.¹ The survey is conducted every three years, and it takes approximately a year and half for the micro data set to be released for public use.

The published tables of the SCF data² provide useful information on household wealth. One such chart makes it clear that the wealthiest households became much wealthier during the last decade (see Figure 2). In 2001, the top ten percent of wealthiest households had \$2.8 million

¹ Holloway, A. (1991), "The Role of Homeownership and Home Price Appreciation in the Accumulation and Distribution of Household Sector Wealth," *Business Economics*, April, pp. 38-44. Melvin L. Oliver & Thomas M. Shapiro, *Black Wealth, White Wealth*, Routledge, 1997, p. 57. Zhu Xiao Di, The Role of Housing as a Component of Household Wealth, Joint Center for Housing Studies at Harvard University Working Paper Series, W01-6, July 2001.

² Tables in the article by Federal Reserve staff Aizcorbe et al. in the January 2003 issue of the *Federal Reserve Bulletin*.

dollars each on average and nearly doubled the 1992 level of \$1.5 million. Over the same period, however, the median net wealth of the bottom quarter struggled to reach zero.



Publicly released SCF micro data are more useful for detailed analysis. For confidentiality reasons, the SCF datasets for public use have been slightly altered from the original data that the Federal Reserve uses for their official publications. However, a comparison between our tabulations of the micro data for public use and published tables in the *Federal Reserve Bulletin* article shows that in general, these numbers match fairly well (see Figure 3). This attests to the accuracy of all the numbers and findings reported in this paper based on the SCF micro data for public use.

Figure 3

A Comparison Between Published SCF Tables and Tabulation of SCF Data Released for Public Use
Net Wealth in Thousands of 2001 Dollars

	1992		1995		1998		2001	
	SCF1*	SCF**	SCF1*	SCF**	SCF1*	SCF**	SCF1*	SCF**
All Families	61.3	61.4	66.4	66.6	78.0	78.0	86.1	86.1
White Non-Hispanic	86.2	86.2	88.5	88.6	103.4	103.4	120.9	120.9
Nonwhite or Hispanic	14.8	14.8	18.3	17.9	17.9	17.9	17.1	17.2
House Owner	122.3	122.4	120.2	120.0	143.8	143.9	171.7	171.8
House Renter or Other	4.0	4.0	5.6	5.6	4.6	4.6	4.8	4.8
Age Under 35	11.4	11.4	13.9	13.9	9.9	9.9	11.6	11.6
Age 35 - 44	55.1	55.1	60.3	60.1	69.0	69.1	77.6	77.6
Age 45 - 54	96.8	96.9	107.5	107.1	114.8	114.8	132.0	134.0
Age 55 - 64	141.1	140.8	133.2	133.4	139.2	139.2	181.5	181.7
Age 65 - 74	121.7	121.6	128.0	128.1	159.5	159.5	176.3	176.7
Age 75 or more	107.5	107.5	107.5	107.5	136.7	136.9	151.4	151.4

* Published SCF tables

** JCHS tabulations of the SCF micro data for public use

In order to highlight historical trends, this paper not only compares the 2001 SCF to 1998 SCF data, but also reviews earlier SCF data back to 1989. An extended historical view allows observation of how the wealth distribution has changed both in economic expansions and recessions. Figure 4 shows that the top 20 percent of households added 2.5 percentage points in 2001 to their share of aggregate household net wealth over 1992 while other households lost share during this period of economic growth. The 1991 recession apparently took a greater toll on wealth among the top quintile than the 2001 recession. As a result, the 1992 SCF revealed a temporary dip in the share of wealth held by the top quintile that the 2001 survey did not (see Figure 4).

Figure 4: Share of Aggregated Household Net Wealth by Wealth Quintile

	1989	1992	1995	1998	2001
5th Quintile	81.0%	80.1%	80.5%	81.4%	82.6%
4th Quintile	13.1%	13.2%	12.5%	12.4%	11.8%
3rd Quintile	5.2%	5.5%	5.5%	5.1%	4.5%
2nd Quintile	1.2%	1.5%	1.6%	1.4%	1.2%
1st Quintile	-0.5%	-0.3%	-0.2%	-0.3%	-0.1%

Source: JCHS tabulations of the Survey of Consumer Finances.

The aggregate net wealth of the bottom quintile households in the distribution has always been negative, and in 2001 it was about \$50 billion in the red. Credit card loans alone added up to over \$40 billion, but installment plan loans aggregated to \$150 billion. About one third of the bottom quintile households have larger debts than assets and so have negative net wealth. Only half of them have \$100 or more in net wealth.

An estimate is also made of household wealth in 2002 to gauge the competing influences of rising home values and falling stock values on household net wealth in 2002, holding other forms of wealth constant. While not updating all elements that contribute to net wealth, this approach does update two of the most significant and provides a rough estimate of the changing relative roles of these two cornerstones of wealth through 2002.

Housing Wealth as a Share of Household Net Wealth

According to the 2001 SCF, American households had net wealth of \$42.1 trillion and assets (without netting out debt) worth \$47.9 trillion. Due to continued appreciation in house prices, remodeling investments, and additions to the housing stock, primary residences remained a large slice of the whole (27.3%) as shown in Figure 5, and a dominant share of non-financial assets (46.8%), as Figure 6 demonstrates.

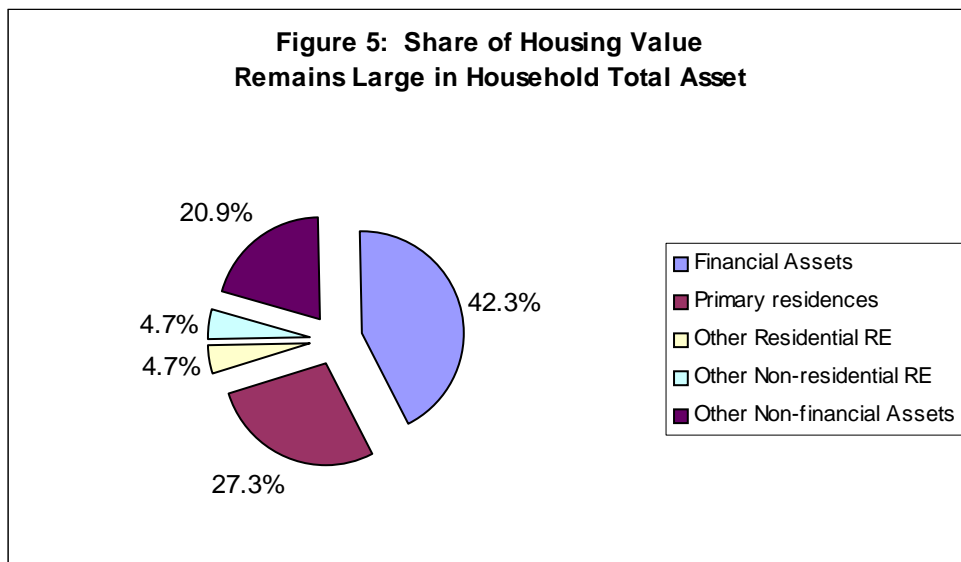
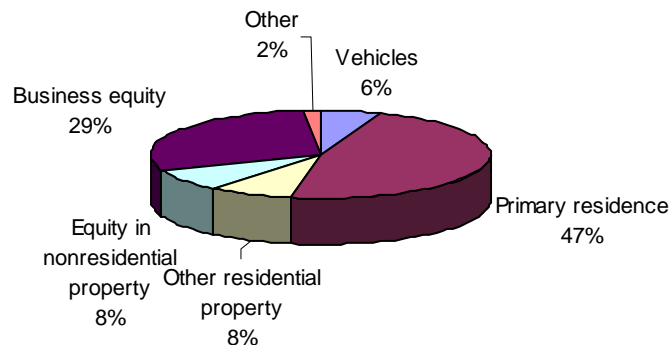


Figure 6: Primary Residence Dominates Household Non-financial Assets



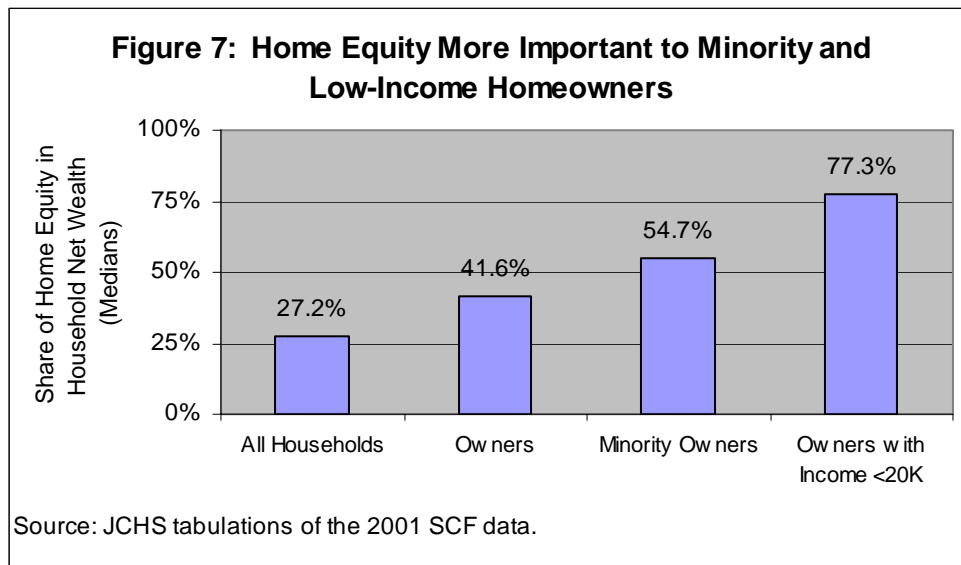
Source: JCHS tabulations of the 2001 Survey of Consumer Finances.

Among financial assets, stock wealth (which includes directly or indirectly held stock equities such as individual stocks, stocks held by mutual funds, pension funds, IRA retirement accounts, or some other managed assets) comprises the majority (56%) while transaction accounts and CDs are only about 12 and 3 percent, respectively. On the non-financial side, business equity looms large and this category includes “sole proprietorships, limited partnerships, other types of partnerships, subchapter S corporations and other types of corporations that are not publicly traded, limited liability companies, and other types of private business.”³

While few households invest in the stock market with borrowed money, most homeowners achieve homeownership through mortgages. Particularly after the 1986 tax law change that allowed only mortgage debts for tax deductions, many consumer credit loans were consolidated into home-secured loans. Such differences between stock wealth and housing wealth are important to bear in mind as we discuss housing wealth and its share of household net wealth in the rest of the paper.

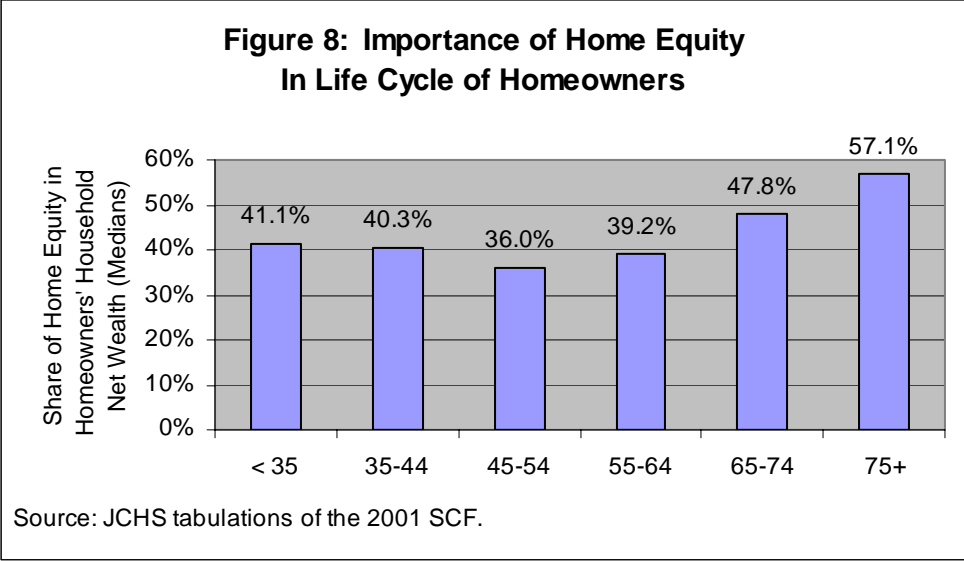
³ Aizcorbe et al., “Recent Changes in U.S. Family Finances: Evidence from the 1998 and 2001 Survey of Consumer Finances,” the *Federal Reserve Bulletin*, January 2003.

Calculated at the individual household level,⁴ the median amount of wealth all households held in their homes was 27.2 percent in 2001. Among homeowners, the median amount they held in home equity was 41.6 percent. Minorities and low-income homeowners, on average, held notably more of their net wealth in the form of home equity (see Figure 7). In other words, housing wealth is relatively more important to minority and low-income households.



The home equity's share of household net wealth also increases with age. As people grow older and pay off their mortgage debts, home equity grows as a share of net wealth. Figure 8 demonstrates the role of housing in the accumulation of net household wealth during a life cycle. Middle-aged people are likely to begin making other types of investments, thereby reducing home equity's share of net wealth. However, as they pay off their mortgage debt later in life, housing wealth becomes dramatically more important. For half of all owners aged 65-74, housing wealth constitutes at least 47.8 percent, and by age 75 more than half of all net wealth.

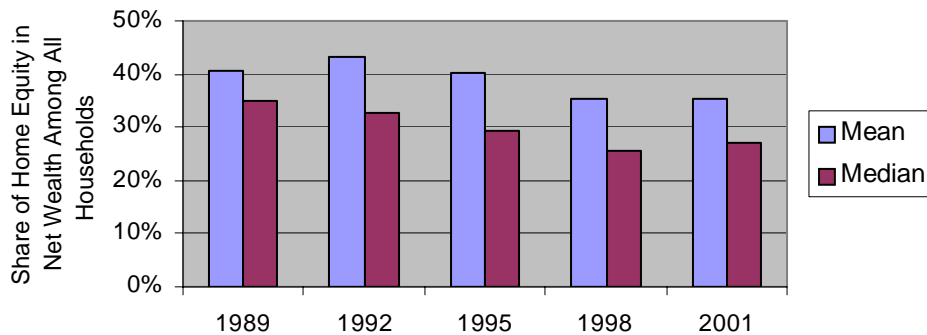
⁴ Such calculation at individual household level retains a better accuracy and allows for more detailed analysis, but has to exclude households with zero or negative net wealth.



From a historical perspective, the importance of home equity to household net wealth has dwindled, although it has staged a small comeback with the sharp drop in stock wealth in the recent recession. Most importantly, home equity's decline was directly due to the bull stock market in the late 1990s. Many households began to invest in stock, and households who had already invested in stock invested with even more money. In addition, stock values began to rise faster than home prices while homeowners added significantly to their mortgage debt in the process of buying more expensive homes and borrowing more heavily against their home equity. As a result, much of the increase in home values did not translate into gains in home equity. Indeed, homeowners of all ages at the turn of the century carried much more mortgage debt than their counterparts did over a decade ago.⁵ The average home equity share of net wealth of households with positive net wealth was 35.3 percent while the median was 27.2 percent (see Figure 9).

⁵ For more detailed cohort analysis on housing debt, see the forthcoming JCHS working paper by Masnick, Di, and Belsky on the subject.

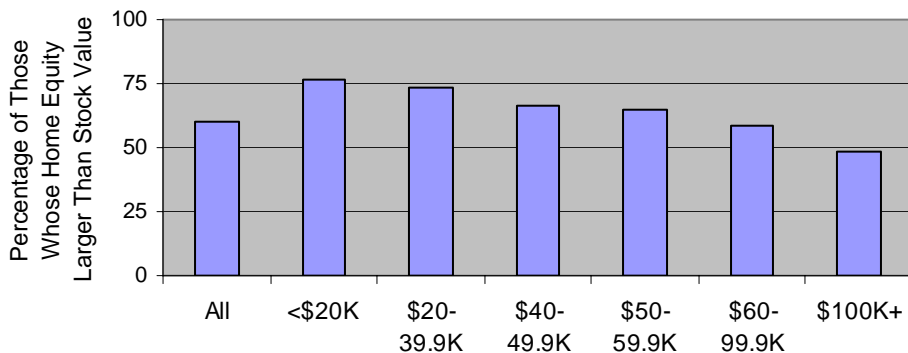
Figure 9: Home Equity Share Slightly Declining But Still Large



Source: JCHS tabulations of the Survey of Consumer Finances.

Even among those who owned both homes and stock⁶, many (60.5%) held more wealth in the former than in the latter. In fact, the majority of these households, except those with annual income greater than \$100,000, still had more wealth in their homes than in stocks (see Figure 10). Among all American households, less than 27 percent had more wealth in stocks than their home. Clearly, housing wealth has a wider and deeper impact on household net wealth. It affects more households and makes up a larger piece in the household wealth portfolio.

Figure 10: Among Homeowners and Stockholders, Except for the Highest Income Group, Home Equity Always Larger



Source: JCHS tabulations of the 2001 Survey of Consumer Finances.

⁶ Broadly defined by the Federal Reserve as directly and indirectly held publicly traded stocks, that include individual stocks, stock mutual funds, and stocks in IRA accounts, other managed assets, and pension plans such as 401k.

Overall, the aggregated amount of home equity in all American households accounted for 20.7 percent of total net household wealth. Looking at homeowners alone, home equity represents 21.6 percent of their net wealth, just slightly higher, because virtually all wealth is in the hands of homeowners. For minority homeowners and homeowners with annual income less than \$20,000, aggregated home equity amounted to 33.7 and 56.4 percent of household net wealth, respectively.

The gap between homeowners and renters in terms of their household net wealth is dramatic. The median net wealth of renters in categorical groups (shown in Figure 11) is only a small fraction of the wealth of owners – ranging from one eighth to one eightieth. Much of this gap persists even after controlling for the age, race/ethnicity, and income of heads of households. As owners have higher average income and education, they can buy homes and accumulate non-housing wealth as well. It is therefore not surprising that a typical homeowner has about 20 to 40 times more net wealth than a renter household, regardless of age and race. The wealth gap between low-income owners and renters appears to be drastic. While a typical low-income homeowner with less than \$20,000 annual income had nearly \$73,000 net wealth, a typical renter with similar annual income only had \$900.

Figure 11: Median Net Wealth Gap Between Homeowners and Renters

	Owners Median Net Wealth	Renters Median Net Wealth	Owner/renter Ratio
Total	171,800	4,810	35.7
Age			
Under 35	60,180	3,100	19.4
35-64	185,420	6,950	26.7
65+	244,950	6,500	37.7
Race/Ethnicity			
White	198,900	8,120	24.5
Black	69,000	1,890	36.5
Hispanic	70,560	2,650	26.6
Income			
Under \$20,000	72,750	900	80.8
\$20,000-49,999	111,890	7,670	14.6
\$50,000+	291,120	37,700	7.7

Source: JCHS tabulations of the 2001 Survey of Consumer Finances.

Several factors could contribute to the disparity between owners and renters, particularly in the low-income group. First, more owners with incomes under \$20,000 are elderly than renters in this income group. They have had a lifetime to accumulate assets. Second, some fraction of low-income homeowners, in a given year, may have temporary income reductions, but in fact, they generally have higher incomes and wealth. Third, owners can contain their housing costs better than renters and thus may have more left over to save or invest. But, even after subtracting elderly homeowners with annual incomes under \$20,000, the difference is still large at \$39,420 to \$900, or 44 times. Based on a multivariate equation that related household net wealth to homeownership, after controlling for household income and the age of the household header, an owner household is likely to have \$165,211 more in net wealth than a renter household.

Of course a large part of the gap between owners and renters reflects the fact that people with greater wealth are better able to afford homeownership and also are more apt to buy homes. As a result, homeowners have significantly higher average amounts of non-housing wealth. In fact, only among the elderly, minorities, and those with less than \$50,000 annual incomes, does the typical owner have more housing wealth than non-housing wealth (see Figure 12).⁷ In all cases, nevertheless, the housing wealth of owners far exceeds the total net wealth of comparable renters.

Figure 12: Homeowners' Housing Wealth, Non-Housing Wealth, and Renters' Wealth

Medians	Owners Housing Wealth	Owners Non-housing Wealth	Renters Wealth
Total	70,000	80,500	4,810
Age			
Under 35	26,000	27,200	3,100
35-64	68,000	95,800	6,950
65+	100,000	90,000	6,500
Race/Ethnicity			
White	77,000	98,300	8,120
Black	34,000	23,800	1,890
Hispanic	46,000	19,800	2,650
Income			
Under \$20,000	50,000	9,890	900
\$20,000-49,999	55,000	42,000	7,670
\$50,000+	90,000	175,600	37,700

Source: JCHS tabulations of the 2001 Survey of Consumer Finances.

⁷ The housing and non-housing components in owners' net wealth do not add up to the numbers shown in Figure 11, because they are the medians of two different series.

Historical trends show that median net wealth between owner and renter households by age, race, and income has diverged over the last few years. Figure 13 demonstrates the actual gap in median household net wealth between owners and renters, which widened during the later half of the 1990s. Reversing the trend of the early 1990s, nearly every categorical group had a larger owner/renter gap by 2001. This reflected the fact that homeowners benefited from home price appreciation, and were more apt to own stock. Stock appreciated spectacularly over the period, and households with relatively more wealth were more apt to become homeowners. Between 1995 and 2001, while households in the bottom quintile of wealth distribution gained in homeownership rates by 1.5 percentage points, the homeownership rates of other relatively wealthier households increased by 3 to 4 percentage points. Also, as homeownership surged during the period, many renters with greater wealth became homeowners, leaving the least wealthy remaining as renters.

Figure 13: Owner-Renter Gap in Median Net Wealth Much Bigger in 2001

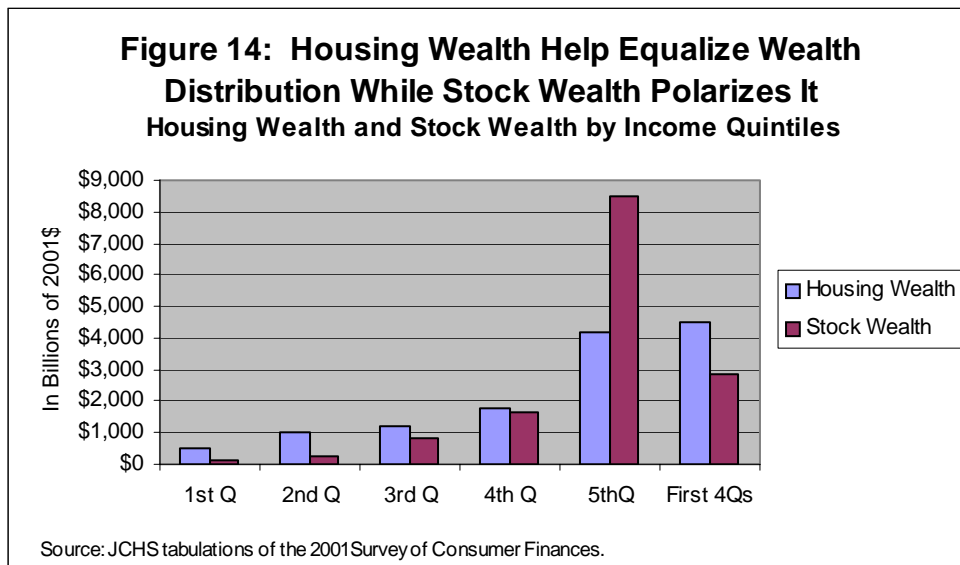
All in 2001\$	1989	1992	1995	1998	2001
Total	136,381	118,419	114,401	139,328	166,990
Age					
Under 35	52,668	55,832	45,827	41,450	57,080
35 - 64	156,549	129,519	125,023	152,434	178,470
65 and over	146,014	141,249	158,438	178,002	238,450
Race/Ethnicity					
White	148,162	128,219	124,422	156,069	190,780
Black	60,429	61,126	58,749	71,426	67,110
Hispanic	48,537	58,628	74,896	74,018	67,910
Income					
Under \$20,000	61,815	65,384	74,526	75,150	71,850
\$20,000 - \$49,999	108,356	89,712	88,685	103,734	104,220
\$50,000 and over	192,278	170,687	154,242	199,849	253,420

Source: JCHS tabulations of the Survey of Consumer Finances.

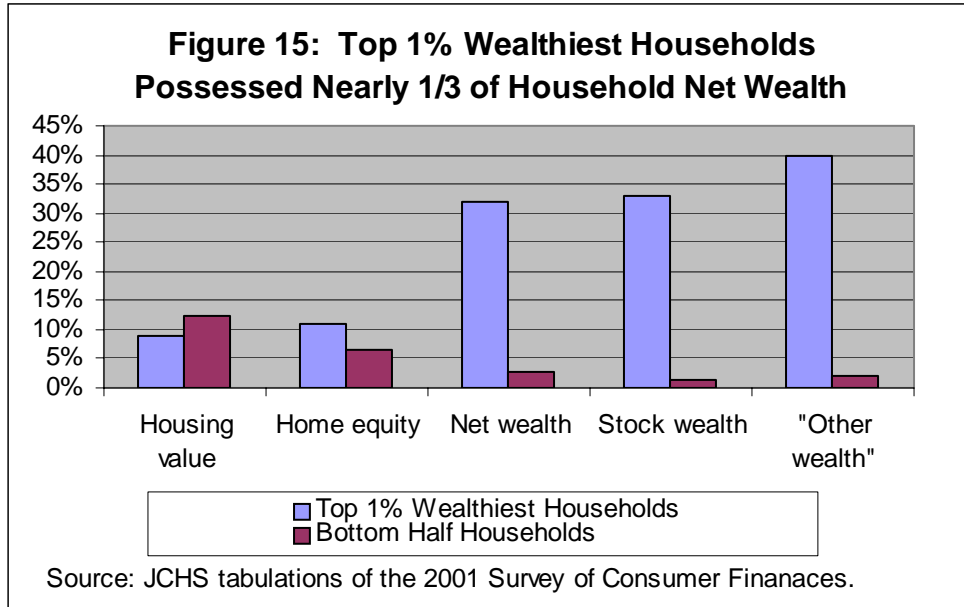
Housing Wealth's Broader Distribution Across All Owner Households

Despite the huge gap in household net wealth between homeowners and renters, housing wealth is actually more evenly distributed than many other types of wealth. Therefore, it serves as an equalizing factor in the distribution of household wealth.

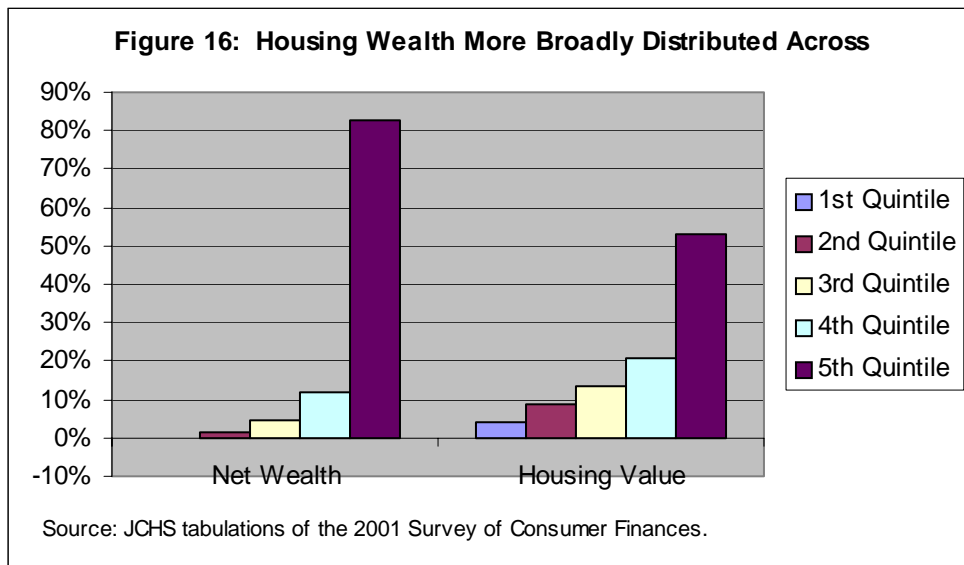
Housing's more even distribution stands in stark contrast to stock wealth. Figure 14 compares aggregate housing wealth vs. stock wealth by household income percentiles. Except for households in the top income quintile, housing wealth is consistently larger than stock wealth. Among the households in top income quintiles, stock wealth is twice the size of housing wealth. Grouping the first 4 quintiles of households together creates aggregated home equity that exceeds that of the top quintile, but their stock wealth is merely one third of that of the latter.



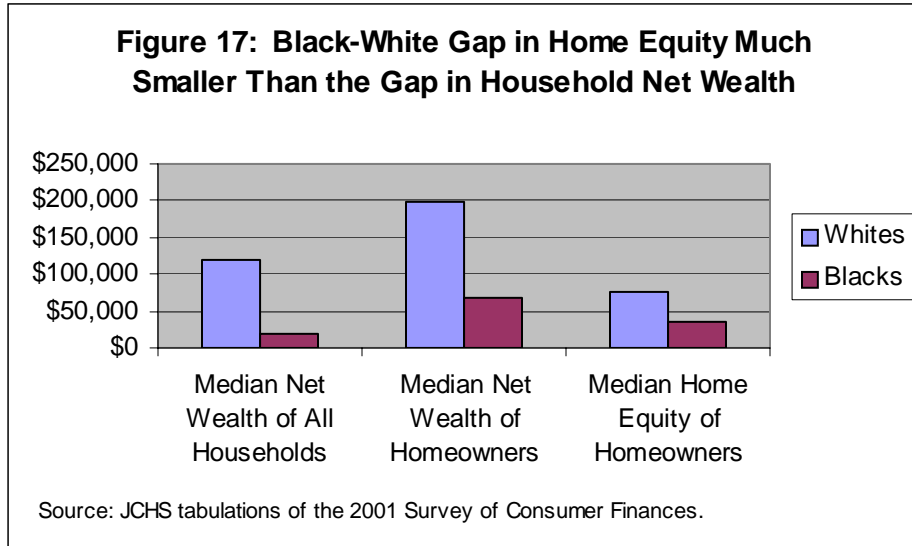
Indeed, among various types of wealth, both housing value and home equity are more equally distributed. Figure 15 shows how the top 1 percent of wealthiest households and bottom 50 percent of households had different shares in housing value, home equity, net wealth, stock wealth, and other wealth. The former group possessed nearly one third of the aggregated household net wealth, while the latter had only a meager 3 percent. Yet, the aggregate housing value of the former was actually smaller than that of the latter (\$1.2 vs. \$1.6 trillion).



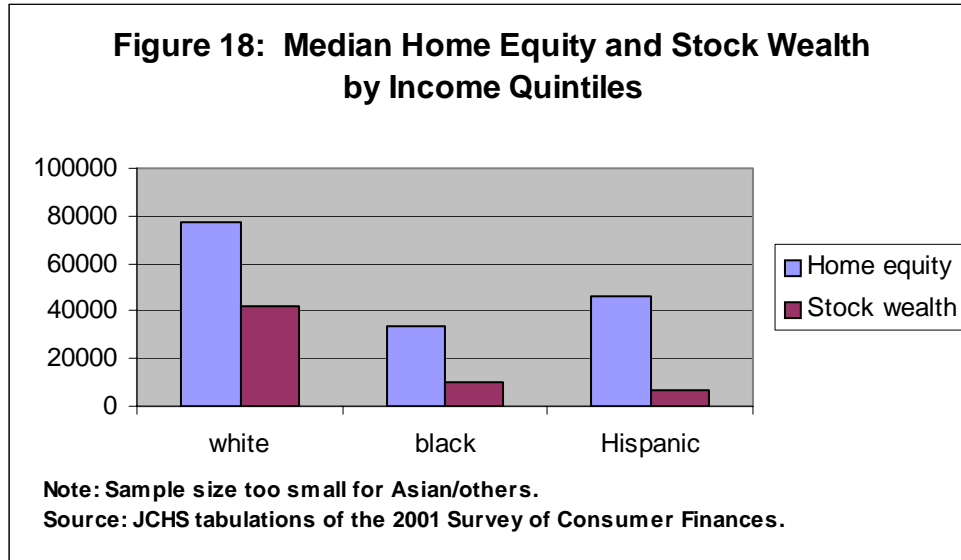
The distribution of housing wealth is less concentrated. The top 20 percent of homeowners with the most housing wealth controlled 53.2 percent of it, while the top wealth quintile possessed 82.6 percent of aggregate household net wealth (see Figure 16).



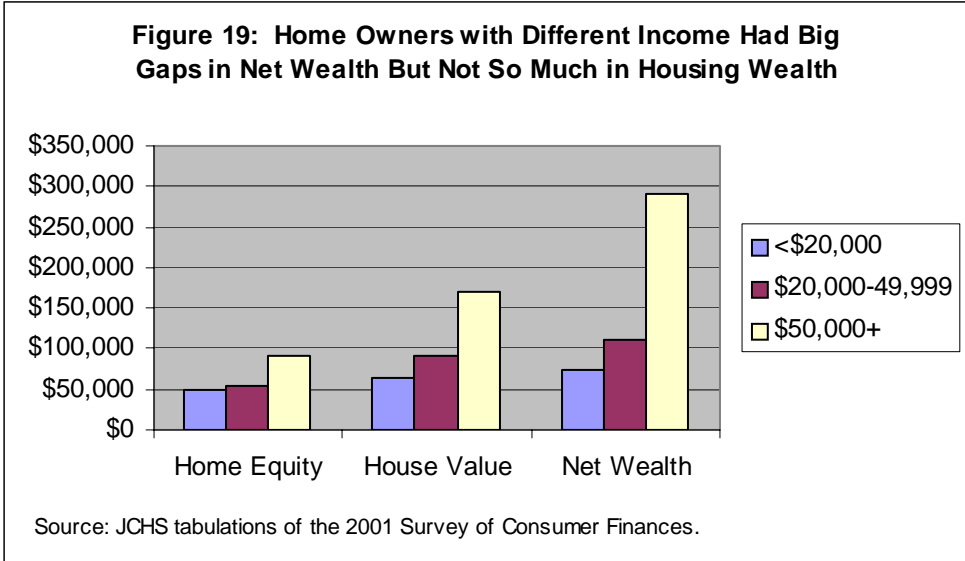
The broader distribution of housing wealth also holds for the differences between whites and blacks. While blacks lagged whites by \$100,000 to \$130,000 in median net wealth, black homeowners lagged by just \$43,000 in median home equity in 2001 (see Figure 17).



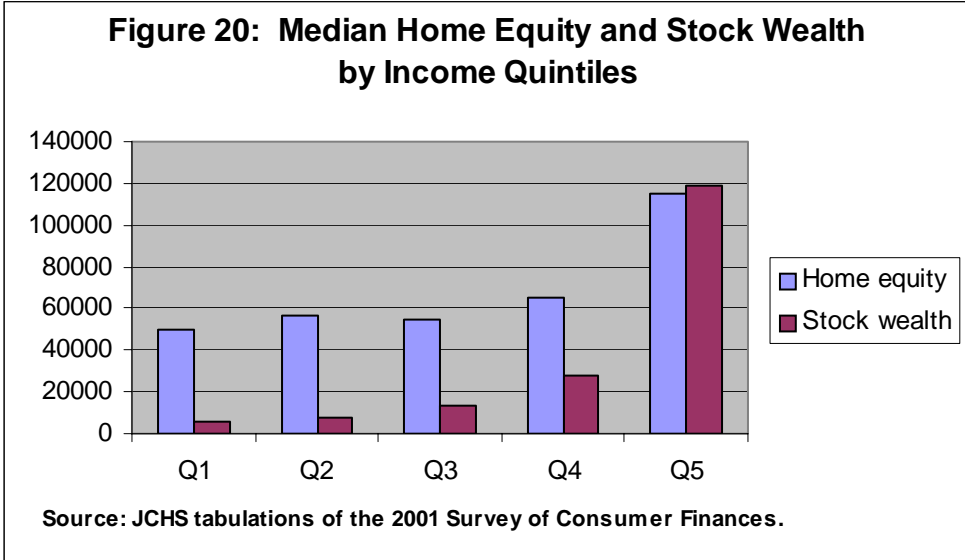
This can also be seen from the contrast between home equity and stock wealth. As Figure 18 shows, while the white median home equity is about twice that of blacks and Hispanics, the former has more than four times the stock wealth.



Similarly, across different income groups, housing wealth is more broadly distributed than household net wealth. Compared to low-income homeowners, those owners with \$50,000 or more annual income have 4 times the amount of net wealth, but less than twice the amount of home equity (see Figure 19).



Housing wealth’s broader distribution among various income groups stands in stark contrast to stock wealth. While the bottom 4 quintiles have a healthy amount of home equity, they scarcely have any stock wealth (see Figure 20). Different from the aggregate numbers shown in Figure 14, Figure 20 shows that even among the second highest income quintile households, home equity is typically twice as large as stock value.

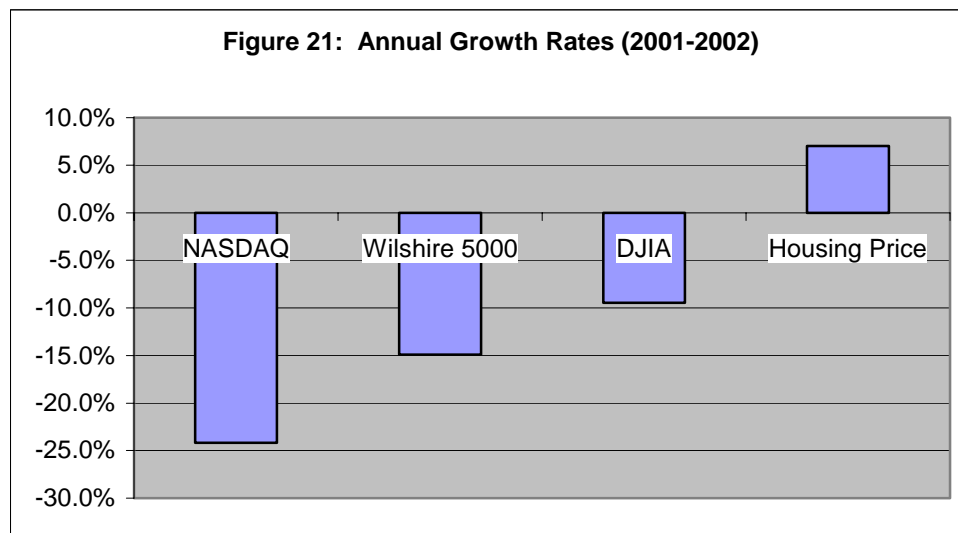


Housing Wealth Helps Most American Households Grow Their Net Wealth

Owning a home is one of the most commonly held non-financial assets, second only to owning a vehicle. Even after the rapid growth in ownership of publicly traded stocks during the 1990s, the share of households directly or indirectly owning stocks stood at only 52 percent – much less than the 85 percent who owned vehicles and the 68 percent who owned homes.

More importantly, these three types of assets influence wealth accumulation quite differently. Vehicles, except for antique and collectible models, are depreciating assets that are used to produce transportation services. Thus, they are a consumption item rather than an investment; they do not add to wealth accumulation with time. Stock holding is an investment tool that often yields high returns, but it is also associated with high risks. The plummeting stock market during the last recession reduced household wealth for those stockholders who purchased the stock at its peak value. Homeownership, on the other hand, often yields a steady return that is always higher than general inflation. A strong contrast between returns in homes and that in the stock market occurred during the recent years.

A comparison between trends in the stock and home price during 2001-2002 illustrates the difference in the investment returns of these two items. Figure 21 shows the annual rate of change based on the monthly averages of NASDAQ, Wilshire5000, and DJIA closings and the change in median home prices between 2001 and 2002.⁸



⁸ Home sales prices are based on Freddie Mac conventional mortgage home price index.

While the DJIA and NASDAQ show a 10 to 25 percent negative growth between 2001 and 2002, the Wilshire 5000 index, which is a more balanced mixture of larger and smaller firms across all sectors of the economy, shows a drop intermediate between the two. If nominal home equity of all owners grew between 2001 and 2002 at the national growth rate of 7 percent, and all households who owned stocks saw the value of their stocks fall by 15 percent of the Wilshire 5000 stock index, then the median homeowner's equity as a share of net wealth likely rose from 41.6 percent to 44.7 percent in just one year. Estimated median net wealth of all households would rise from \$86,000 in 2001 to \$87,000 in 2002, while homeowners' median home equity would rise from \$70,000 in 2001 to \$75,000 in 2002 and stockholders' median stock value would go down from \$35,000 in 2001 to less than \$30,000 in 2002. All these statistics underscore how housing wealth helped American homeowners grow their household net wealth during the last recession.

Conclusion

Housing wealth continues to be the cornerstone of household net wealth for most Americans. Half of homeowners hold more than 41 percent of their household net wealth in the form of home equity, and half of all American households have at least 27 percent of their household net wealth in the form of home equity. A typical minority homeowner or low-income homeowner with annual income less than \$20,000 holds respectively one-third and fully 56 percent of their net wealth in home equity. Housing wealth is more evenly distributed than many of the other components of household net wealth. While the top 1 percent of the wealthiest households possessed nearly one-third of aggregate household net wealth, the bottom half owned less than 3 percent of the wealth. The housing component of household net wealth helped most American households keep their net wealth growing during the last recession. Between 2001 and 2002, a typical homeowner is estimated to have seen his or her home equity rise by \$5,000 while a typical stockholder would have seen his or her stock value drop by \$5,000.