Homeownership, the Great Recession, and Wealth: Evidence from the Survey of Consumer Finance

Draft, January, 2013

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For generations, homeownership has been considered a fundamental piece of the American Dream and home equity has represented a key component of the household balance sheets as well as the type of asset in which most U.S. households held the majority of their wealth (Bucks, Kennickell, Mach, & Moore, 2009; Dickerson, 2009: Quercia, Freeman, & Ratcliffe, 2011). In addition, research has shown positive associations between homeownership and many benefits at the individual, family, neighborhood, and community levels. At the individual level, homeownership appears to enhance overall life satisfaction and improve health outcomes. At the family level, the benefits associated with homeownership include greater participation in the labor force by parents and higher levels of education among children. The benefits of homeownership found at the neighborhood and community levels include better upkeep of housing, increased improvements to property, and greater stability of the local area. (Coulson and Fisher 2002; Dietz and Haurin 2003; Herbert and Belsky 2006; Robert and House 1996; Rossi and Weber 1996; Scanlon and Page-Adams 2001; Van Zandt and Rohe 2006). Given the growing evidence of the positive benefits of homeownership, homeownership has been often viewed as a tool for social and economic mobility.

Given these positive benefits of homeownership, considerable efforts have been made over the last 20 years to increase opportunities for home purchase for all strata of American families. At the same time, scholars and policy makers have brought increasing attention to the multitude of barriers to homeownership for low-income and minority families (Barakova et al. 2003; Collins, 2004; Di & Liu, 2004; Haurin & Morrow-Jones, 2006; Herbert & Tsen, 2005; Ratner, 1996; Santiago & Galster, 2004; Zhao, Ondrich, & Yinger, 2006). These obstacles include financial obstructions; lack of information about the home-buying process, and lack of experience with that process; severe shortage of affordable housing, especially in desirable neighborhoods; and discriminatory practices against minority families. The effect of these obstacles combined with other factors has created a substantial income-based division in homeownership. This housing-wealth gap is clearly reflected in data from 2004 that were used by Herbert et al. (2005) to compare homeownership rates of very-low income households (i.e., income ≤ 50% of the area median income [AMI]) and higher-income households (i.e., income ≥ 120% of the AMI). Although 51% of very-low income households owned their home, this rate was significantly lower than the 88% of higher-income households that owned their home (Herbert et al., 2005).

The racial/ethnic gap in homeownership is equally troublesome. In contrast to the 7 of 10 White families who own their home, only 4 of 10 families among either African Americans or Latinos are homeowners (Quercia, Freeman & Ratcliffe, 2011). The implications of the homeownership gap are substantial and long-reaching because home equity is the primary way that most U.S. households build wealth and improve their balance sheet. Thus, the disparities in homeownership rates translate to a significant wealth gap across various income and racial/ethnic groups.

To address the housing wealth gap, regulatory changes were implemented and programs developed that aimed to improve rates of homeownership among low-income and minority families by increasing their access to fair and affordable mortgage products. The best of these efforts focused on safe-lending practices and programs that provided support services for first-time homebuyers such as the Community Advantage Program and Individual Development Accounts (IDAs). However, other efforts were exploitive and involved predatory lending practices, including selling high-risk products and improper lending processes. These bad products resulted in high rates of mortgage default and the catastrophic housing crisis.

Nevertheless, even in the midst of the housing crisis and in the aftermath of the economic downturn, home equity has continued to be a major part of the balance sheet for American households. This paper uses panel data from the Survey of Consumer Finances to examine homeownership as a component of the household balance sheet and to explore the various trajectories of distinct segments of homeowners as related to wealth loss and gain between 2007 and 2009.

Prevalence of Homeownership

Over last 20 years, the dynamic of the U.S. housing market created a picture of homeownership never been seen before. First, the housing market experienced unprecedented growth and expansion, reaching an all-time high with almost 70% of U.S. households owning their homes. This expansion included households at all income levels, with significant growth occurring among low- and moderate-income (LMI) households. When this housing bubble burst in 2008, the sudden collapse created a "perfect storm" of foreclosures and declining home values, which in turn, triggered the nation's economic downturn (Desilva & Elmelech, 2012). Even with these dramatic and sudden changes in the housing market, homeownership remains at a record high when compared with any point in the 20th century, with 67.1% of U.S. households owning their homes (Desilva & Elmelech, 2012).

The continued high rate of homeownership is important because home equity is a key mechanism for accumulating wealth. The wealth invested in owner-occupied homes is the largest source of savings for most LMI households, and surpasses total investments in other assets such as retirement or savings accounts. U.S. homeowners hold an average of 48% of their total household wealth in their home equity (Di, Yang, & Liu, 2005). However, this critically important means of building wealth is less accessible to households in the lowest fifth of the income scale because just about half of these lower-income households own their home (Carasso et al., 2005).

Although homeownership rates of low-income and minority households still lag behind those of higher-income households, LMI homeownership has accounted for much of the overall increase in homeownership that has occurred over the last half century. The national rate of homeownership increased almost 5% during a 45-year period (1960 to 2005), resulting in a national rate of 66.9%. During this period, homeownership increased at a faster rate among low-income and minority households than other segments of the population. For example, in a 5-year period (1994 to 1999) the number of low-income and minority homeowners increased by more than 800,000 households (Belsky & Duda, 2002). These increases clearly demonstrate that LMI households want to and will pursue homeownership when they are able to overcome the disparities and barriers that have historically hindered homeownership.

Homeownership – a safe financial investment?

Generations of American households and financial advisers have shared the long-standing belief that homeownership was a safe, efficient way to build wealth (Rappaport, 2010). This belief was embodied in the perpetual quest for the American Dream of homeownership, and demonstrated by the majority of U.S. households who were homeowners

The recent crises in the housing and mortgage industries, however, wiped out millions of dollars of home equity, creating a major risk for the financial security of these households. This sudden shift from safe investment to precarious portfolio was hypothesized to be especially true for low- to moderate-income (LMI) households. In the wake of this exposure to financial vulnerability, many experts have called for a reexamination of the goal of homeownership and have urged the nation to rethink the American Dream (Dickerson, 2009).

A relatively recent literature review conducted by Herbert and Belsky (2008) focused on the empirical evidence for the relationship between homeownership and long-term wealth accumulation among low-income and minority U.S. households (for example, see Boehm & Schlottman, 1999; Di, Belsky, & Liu, 2007; Di, Yang, & Liu, 2003). Herbert and Belsky concluded that, on average, homeownership had improved the balance sheets of households over the long-term. In addition, the research team found evidence suggesting the positive effect of homeownership on the relative gains of the household balance sheet was stronger for low-income homeowners than their high-income counterparts. Although high-income homeowners historically gain more in absolute terms from homeownership, those gains are the result of correlations with other factors such as the higher levels of income, education, and wealth that are "pre-existing conditions" among this group. Nevertheless, one caveat that must be considered is that most of the evidence included in Herbert and Belsky's review came from studies conducted before the onset of the housing crisis in 2006-2007.

Similar to the findings of the above study, Di, Belsky, and Liu (2007) examined 18 years of data from the Panel Study of Income Dynamics (PSID; collected 1984 thru 2001) to compare differences in wealth gains between homeowners and renters. This longitudinal evaluation of tenure status showed that when homeowners were compared with those who remained renters, homeowners had significantly higher wealth accumulation. In addition, Di and colleagues (2007) found that longer periods of homeownership were associated with greater accumulation of wealth. The association of building wealth with homeownership was consistent with the findings of an earlier study conducted by Di, Yang, and Liu (2003) that examined the same PSID data. The earlier study found that low-income homeowners who had maintained homeownership throughout the 18-year study period reported an average of 8 times the amount of wealth as those who rented their home during the study period (Di et al, 2003). It is important to note that the findings of the latter study are considered especially trustworthy because the analysis controlled for household characteristics (e.g., initial levels of wealth, the household's prior savings behavior) that could confound the effects of homeownership on a household's ability to accumulate wealth.

Last, research has shown that similar to other investments, the determinants of homeownership as an effective investment for building wealth include market conditions (e.g., demand for owner-occupied housing) and the overall condition and health of the economy at a specific time (Rappaport, 2010). The timing of investment in homeownership is especially important for LMI households because they are likely to have few liquid assets, and therefore, are less able to survive long periods of unfavorable market conditions (Belsky & Duda, 2002).

A contrasting perspective on homeownership was provided by Rappaport's (2010) comparison of wealth between owners and renters over the course of 10-year occupancies. Interestingly, Rappaport found that in some periods, homeowners experienced greater wealth gains than renters, whereas in other periods, renters who invested in stock and bonds had greater wealth gains than homeowners. Perhaps not surprisingly given the recent declines in home prices, Rappaport concluded that for the period 2000 thru 2009, the better option for building wealth was to rent a home and invest money in areas other than housing. An important caveat that must be kept in mind is that Rappaport's study tracked and compared the wealth trajectories of hypothetical renters and owners while holding constant household composition, income, and non-housing spending.

Data & Measurement

This paper uses data from the 2007 triennial cross-section of the Survey of Consumer Finances (SCF). The survey oversampled high-wealth households but with weights is statistically representative of the United States population (Bricker, et al. 2011). The SCF is generally considered the gold-standard data for understanding the wealth holdings of the American public.

The 2007 SCF sample is unique in that the Federal Reserve decided to reinterview the panel in 2009 to track their wealth trajectories over the course of the Great Recession; SCF cohorts are usually only interviewed once. The reinterview panel offers a unique data source to track the wealth trajectories of households over time.

Using panel data poses several challenges in interpretation that should be noted. First, because the original panel was reinterviewed, the 2009 interview data are not representative of the 2009 population but of the 2007 population the sample was weighted to represent. Second, the pattern of response to the follow-up survey may bias findings on 2009 wealth levels and change from 2007 to 2009. Of those in the 2007 panel, about 90% were successfully reinterviewed in 2009. It is suspected that there may be some survivorship bias in the data (Bricker et al 2012a). Those with better trajectories from 2007 to 2009 may be more likely to respond in 2009 than those who had worse outcomes. Even with these complications, the 2007-2009 reinterview panel is an unparalleled resource for the examination of changes in household wealth during the Great Recession.

Several characteristics of these data are broadly consistent with those in other SCF cohorts and in data measuring wealth more generally. In the measure of wealth there are frequent instances of item-missing data, stemming both from respondents not knowing the requested values of specific holdings and from a reluctance to share sensitive information with interviewers. While the typical number of missing cases on a given item may be small, when these items are summed to aggregates like net worth or total assets, the number of missing cases increases quickly. Because the overall fraction of missing information is quite small, these data are almost always imputed. The SCF is no exception and the public-use SCF data files used here are released as five complete-information implicates.

The Measurement of Wealth

In this paper, wealth is operationalized as net worth. Net worth is the sum of the value of all assets held by a household, less the debts owed by the household. The SCF instrument asks about a comprehensive set of products and accounts that households use to store value and owe money on. To facilitate presentation, we group these assets and debts into the categories shown in Figure 1. All assets and debts measured in the SCF are captured in these categories (Bricker, et al. 2012b). The miscellaneous assets category captures a broad range of property that stores value and can total substantial amounts (consider, for instance, the value of all the appliances, electronics, and furniture found in an owned home).

[Fig. 1. Components of net worth about here]

For some analyses, we disaggregate housing equity (home value less home debt) from non-housing net worth. The latter quantity is net worth as described above less home equity. This measure captures the household's wealth that is not tied up in housing.

All of the asset and debt values included in the analysis are self-reported by respondents and are presented in constant 2009 dollars. Some respondents may overestimate or underestimate the value of their holdings or debts. In particular, these data use user-reported property values that other research has been found to underestimate declines that obtained in housing markets during the recession.

It should be noted that at each wave, in 2007 and in 2009, respondents were asked about the value of assets and debts at that point in time, not to estimate change between the time points. The change measures presented here are the simple difference between the two.

In the paper, we present data using both dollar change from 2007 to 2009 and change from 2007 to 2009 as a percentage of 2007 value. Each measure offers valuable insights into the dynamics observed and highlights facets of households' experience that are missed by focusing on one or the other. For cases where the 2007 value was less than zero (e.g. 2007 net worth), the percentage change is given by sign(2007 to 2009 change) *absolute value (2007 to 2009 change/2007 value). This gives an approximation of the magnitude and maintains the directional quality of the change.

Selection of samples

Importantly, this paper focuses primarily on the economic fates of households that owned their home in 2007. In 2007, the wealth and household balance sheets of the population of owners and renters differed dramatically and make accurate comparison deeply problematic. For reference, at the end of the paper we juxtapose some findings for homeowners with those observed among renters.

To gain additional traction on the dynamics of wealth among homeowners, we look at the overall population and at subsamples of the population defined by characteristics in 2007. These subsamples were chosen because they associate with prior findings of differential wealth trajectories. In this paper, we examine "typical" homeowners, and then divide the sample by race and by wealth in 2007. The wealth categories are constructed based on the quintile of the full-sample weighted wealth distribution the household belonged to in 2007. The weighted wealth distribution of the 2007 SCF sample is thought to be consistent with the actual distribution of wealth in the population.

Table 1 shows the approximate sample size of each of the sub-groups analyzed in the paper. We say approximate because, owing to the weighting and imputation used in the data, one respondent does not map directly to one case in the data.

[**Table 1 about here]**

First, it should be noted that the number of cases in some of the analyzed subgroups, particularly in the Hispanic and Other categories of race and in the bottom 20 category of wealth are quite small. This increases the sensitivity of the estimates shown for these groups to small numbers of idiosyncratic cases. These figures, while reflective of the underlying reality observed in the data, must be understood to face substantial risk of measurement error.

Methods

This paper employs a straightforward approach to describe the wealth holding and wealth trajectories of homeowners before and through the Great Recession. Several features of the method that account for challenging features of the data are noteworthy. Importantly, each analysis is performed on each implicate and the results are combined for presentation and discussion.

For the numerical presentation of the balance sheets of homeowners before, during, and after the recession, we use waterfall accounting tables. These tables sum from top to bottom. Because of the large leverage of outliers in wealth data, several modifications are adopted to the standard approach of presenting means. First, because we are interested in the trajectory of typical households, we select the households in the presented group whose change in wealth between 2007 and 2009 in dollar amount is between the 25^{th} and 75^{th} percentile of change in that group. Selecting based on 2007 value leads to heavily inflated estimates of change in wealth. Use of the median (as in Table 2) yields tables that do not sum internally and make it hard to see how categories of wealth (which are underestimated at the median) sum to large aggregates.

Proportions and distributions reported in the paper are produced using all available cases for the group. All estimates are produced using weighting variables packaged with the publically-distributed data.

Findings

The balance sheets of homeowners in the period from 2007 to 2009 are characterized by their deep heterogeneity in composition and trajectory. American homeowners hold their assets in a dizzying array of formal and informal accounts and products and owe a broad range of debts. In a balance sheet, the choice of asset and debt allocation is understood to be fungible. That is to say, a household can allocate a dollar to liquid savings or to paying down debt and the snapshot of the balance sheet presented here remains the same.

While most homeowners lost wealth during the recession from 2007 to 2009, there were a diversity of trajectories observed among households. A small number of households experienced monumental gains and losses in wealth, but most experienced relatively small shifts. Interestingly, the part of the balance sheet that led to gains also was unique across households.

Patterns of asset owning

Amid this heterogeneity, one constant emerges in the balance sheets of homeowners. Among those who own homes, the value of an owned home tends to dominate the asset side of the household balance sheet. Figure 2 shows the composition of the asset holdings of homeowners, grouped by quintiles of wealth at 2007. For each quintile, the colored sections of the bar represent the average proportion of a household's total assets in 2007 that are accounted for by a given type of asset.

[Figure 2 about here]

Among those whose net worth put them in the lowest quintile of the population, we observe that the home accounts, on average, for 70% of the household's assets and housing and physical property together account for over 90%. While wealthier segments of the population are not as home centric in their asset portfolio, only in the top quintile does the home not account for the largest share of assets. Those in the second quintile average almost 70% of assets in the home; those in the middle quintile about 60%; those in the fourth quintile about 44%; and those in the top quintile about 28%.

It is notable that no quintile holds more than 5% of assets on average in transaction accounts (which are often treated as liquid assets for the purpose of assessing a household's preparedness for emergencies). Likewise, the relatively low prevalence of financial assets and retirement savings on the balance sheets of households in the bottom three quintiles of the wealth distribution.

These distributions highlight two things of particular interest at the onset of the 2007 recession. First, by virtue of the concentration of assets in the owned home, homeowners, and especially low-wealth homeowners, are deeply exposed to the broad downturn in housing prices, owning relatively few non-housing assets. Second, high-wealth homeowners are more exposed to shocks in financial markets through their ownership of retirement savings and financial assets.

Typical households and trajectory

Table 2 shows two depictions of the balance sheet of a typical homeowner in 2007, of the change that typical household experienced between 2007 and 2009, and of the household's 2009 balance sheet. The left-side panel of the table is a waterfall accounting of the balance sheet and sums top to bottom. To address outliers, the left-side panel includes homeowners between the 25^{th} and 75^{th} percentiles of the distribution of wealth change between 2007 and 2009.

The right panel provides a balance sheet that presents sample-weighted median values for each quantity among all homeowners in the SCF sample. Each cell of the right panel shows the median for that cell. For instance, the change in net worth cell is the median change in net worth from 2007 to 2009 for all homeowners. It should be noted that zero-values in this table indicate that fewer than half of households in the sample hold the asset or debt under consideration. Figures in the right panel do not sum top to bottom.

[Table 2 about here]

The typical homeowner's balance sheet, as noted above, is heavily dominated by the owned home in both 2007 and in 2009. This is true both in terms of assets and in terms of debt using both indicators of central tendency. Unsurprisingly, the change between 2007 and 2009 is also one dominated by change in housing.

The typical household lost between $30,000 and $40,000 in wealth in this two-year period; this is about 10% of the household's 2007 wealth. For the typical household, declines in housing values were the driver for the change in wealth.

Figures 3 through 5 present, and then disaggregate, the distribution of change in wealth between 2007 and 2009 graphically. These kernel density plots show the probability distribution of the change, expressed as percent of 2007 value. The height of the plot reflects the likelihood of a case being found at a given point.

As follows from the description of the trajectory of the typical household above, the peak of the distribution for change in net worth is below zero, indicating that most households lost wealth over this period. Nonetheless, a non-trivial proportion of cases experienced positive change in wealth over the observed period.

Figures 4 and 5 disaggregate net worth into non-housing net worth and home equity and show the probability distribution of these variables, again expressed as percent change from 2007 to 2009. Interestingly, the peak of the equity distribution is tightly centered on zero (though still negative) while the non-housing net worth distribution is shifted further left. The low volumes of non-housing net worth held by most households at 2007 may inflate the magnitude of percent change observed. Still, the two distributions suggest that while household's concentration of wealth in the home made that the driver of changes in wealth between 2007 and 2009, substantial losses were also realized in other areas of the balance sheet in the same period.

Race

As the general trends reveal, the balance sheet effects of the Great Recession on homeowners were far from uniform. To further explore the affects of the Great Recession on the wealth of homeowners, we now turn to a detailed look at subgroups of homeowners during the recession, starting with race. In the foregoing, it should be recalled that the Hispanic and Other categories contain relatively few cases and are more sensitive to anomalous cases than larger groups.

Figure 6 shows the change in non-housing net worth by race. The y-axis is the mean ratio of change to the 2007 level for the households in the group between the 25^{th} and 75^{th} percentiles of the group's distribution.

[Figure 6 about here]

Figure 6 shows that while the average percent change in non-housing wealth was similar across groups (excepting the other group that experienced growth in non-housing wealth), change in housing wealth differed across group. The typical white household lost less than half as much home equity between 2007 and 2009 than homeowners of other races, relative to original housing value. This pattern of change could reflect neighborhood effects, choice of housing stock, discrimination in housing markets, or systemically different self-reporting of changing housing values in the down-turn.

While the typical household of color lost a larger portion of their 2007 wealth than the typical white household, they were not substantially more likely to lose net worth in general. Figure 7 shows the proportion of households that lost net worth, and that lost large amounts of net worth by race

[Figure 7 about here]

From the first bar from each group in Figure 7, we see that most people in each racially defined group lost wealth in the recession and that there were not large differences between the groups. While the odds of any loss of wealth were similar across groups, Black homeowners were significantly more likely than homeowners of other races to lose a large portion of net worth in the down turn. About a third of black households lost half of their 2007 net worth or more and almost half lost at least a quarter of their 2007 net worth. This is substantially more than the rates of high proportion loss observed among other racial groups.

Table 3 offers further detail on the racial difference in change in wealth among homeowners between 2007 and 2009. Table 3 shows the accounting waterfall of balance sheets for typical white and black homeowners between 2007 and 2009.

[Table 3 about here]

First, it should be noted that among homeowners, the wealth of white and black households are not equal in 2007. White households have net worth about $140,000 more in net worth than black households, including about twice as much in liquid assets. The two groups owe similar amounts of housing debt, even though white households' housing assets are worth substantially more.

In dollar terms, the typical black homeowner experienced a slightly larger loss of wealth than the typical white homeowner. The typical black household experienced a much larger loss in wealth as a proportion of 2007 holdings than did the typical white household. This expanded the racial wealth gap observed in 2007. The racial gap in financial and retirement assets was also larger in 2009 than it was in 2007.

2007 NW

Next, we examine the changes in wealth among homeowners grouped by wealth level in 2007. Figures 8 and 9 offer distinct views of wealth change in different quintiles of the 2007 wealth distribution. Readers should recall that the quintiles presented are of the wealth distribution for the full population (including renters) and that few homeowners are in the bottom quintile of wealth.

[Figs 8 & 9 about here]

Figure 8 shows dollar change in non-equity net worth and in home equity. The magnitude of the losses experienced by the typical household in the top quintile dwarf the losses seen in less wealthy strata. The top-quintile household lost more in non-housing net worth between 2007 and 2009 than lower quintile households held in 2007. With typical losses in home equity over $60,000, the top quintile lost the highest magnitude in that part of the balance sheet as well. The growth in non-housing wealth in the bottom quintile reflects a small number of households with atypically large miscellaneous debts discharging those debts. Excluding those cases and in the second quintile generally, the typical homeowner experienced a small increase in non-housing net worth between 2007 and 2009.

Figure 9 shows the same changes, but scaled by 2007 levels of non-housing net worth and home equity. By this metric, those in the top quintile still have the largest losses in non-housing net worth but the differences are less dramatic. This shows the relatively high exposure to turbulent financial markets in this group in 2007. The typical household in all of the groups lost equity between 2007 and 2009. The few households in the bottom quintile experienced the largest loss. The loss experienced as a proportion of original value was similar in the top three 2007 wealth quintiles.

Table 4 further explores the dynamics of wealth change by detailing the balance sheet of the typical household in the bottom quintile, the middle quintile, and the top quintile of 2007 wealth.

[Table 4 about here]

In the first panel of Table 4, showing 2007 wealth, the imbalance in wealth across quintiles is obvious. Those in top quintiles hold much more, particularly in financial and retirement, and miscellaneous assets than those in the middle quintile, often an order of magnitude more.

The second panel of the table, looking at 2007 to 2009 change, reflects the much higher level of exposure to markets, and thus losses among high wealth households. The middle quintile losses assets but also discharges debt during the recession. As noted above, the wealth gain reflected among bottom quintile households results from the discharge of large debts by anomalous cases, magnified by the small sample size of that strata.

Overall, the home dominates both sides of the balance sheet of homeowners and the trajectory of home equity is the trajectory of wealth for the vast majority of households during the Great Recession. Excepting high-wealth households with substantial holdings in financial assets, the fate of the home was the fate of the household's wealth. For groups that faced steeper, larger proportion, and more prevalent losses like Black homeowners, this concentration and exposure to home value meant a deeper impact of the recession on balance sheet.

Mobility

In this section, we examine mobility across wealth quintiles between 2007 and 2009. In this section, we bring in non-owning households to supplement insights on mobility around homeowners. The findings are presented in mobility tables. Each table compares 2007 wealth quintile (rows) and 2009 wealth quintile (column). Each cell is the proportion of the sample in that cell. For instance, among all respondents, 15% of respondents were in the lowest quintile of wealth in both 2007 and 2009. Cells on the diagonal, where a person had no mobility, are shaded.

[Tables 5-7 about here]

Table 5 shows the wealth mobility for all SCF respondents, including renters and owners. Table 6 shows the same for 2007 owners and Table 7 for 2007 renters. It should be noted that very few owners were in the bottom quintile of wealth in 2007 and very few renters were in the top quintiles. This reflects the dominant role of an owned home as an investment vehicle in the American balance sheet.

Overall, almost three-fourths of respondents were in the same wealth quintile in 2007 as in 2009. Homeowners were more likely than renters to be in the same quintile than renters (76% vs. 70%). A larger proportion of renters than owners had upward wealth mobility between 2007 and 2009 than owners. As expected, very few large upward or downward changes in wealth were observed. Overall, only 2% of respondents moved more than one quintile up or down and no respondents moved more than two quintiles. This suggests that the wealth distribution is fairly durable and that large magnitude wealth shifts are rare in short time horizons.

Owning and renting, a juxtaposition

To conclude we juxtapose renters and owners. Ideally, having shown some effects on the Great Recession on homeowners, we would want to compare them to renters and tell a causal story about the role of an owned home on the balance sheet during the recession. Table 8 compares owners and renters on a variety of measures.

[Table 8 about here]

The first row of table 8, comparing the 2007 median wealth and owners and renters speaks to the difficulty of rigorously evaluating the differences between the groups. Put simply, the differences between the groups are large enough to leave their balance sheets largely incomparable.

Nonetheless, several cautious observations can be drawn from patterns of wealth loss between the two groups. First, homeowners were definitionaly exposed to the housing market in ways renters were not. This surely contributes to the larger nominal and percentage loss in net worth experienced by owners and the higher proportion of owners than renters who lost wealth from 2007 to 2009. Interestingly, though more likely to lose wealth than renters, owners were less likely to lose a quarter or half of their net worth. Surely part of this is the smaller denominator of renters (2007 wealth), but it also could suggest that an owned home could be a buffer against large losses. This is a fruitful line for future research with a more comparable cohort of renters and owners.

Discussion

This paper uses panel data from the 2007 to 2009 reinterview panel of the Survey of Consumer Finances to examine homeownership as a component of the household balance sheet and to explore the various trajectories of wealth among distinct segments of homeowners. The results presented here indicated that even in the midst of the housing crisis and over the course of the Great Recession, home equity has continued to be the dominant component of the balance sheet for American homeowners. Home equity represents the largest share of the balance sheets for low, moderate, and high wealth households. For those in the bottom 40% of net worth, home equity accounts for 70% of the total wealth. The story is different for households with high net worth, where home equity still accounts for 30%.

We also find those homeowners are deeply heterogeneous in terms of losses and gains during the recession. In absolute terms, wealthier homeowners lost more home equity during the housing crisis, but homeowners with lower initial net worth lost more as a proportion of their total wealth. Compared with losses in home equity, a larger proportion of homeowners had non-housing net worth losses between 2007 and 2009. Households with the highest net worth, who held substantially greater non-equity assets, lost substantially more non-housing net worth in both absolute and relative terms compared to households with lower net worth. Overall, most homeowners experienced a reduction in their net worth during the recession; the typical homeowner lost about 10% in net worth, or $40,000, between 2007 and 2009. A larger proportion of homeowners lost net worth than renters did; however, renters were more likely to lose a large proportion (>25%) of their net worth. Thus, homeownership appears to have increased exposure to loss, but protected against severe loss.

Our results are consistent with previous findings suggesting that racial/ethnic minorities were disproportionately affected by the economic downturn. During the period between 2007 and 2009, Hispanics experienced a 32% drop in home equity, while Blacks experienced a 31% drop and Whites experienced a 15% drop. Equity changes for the other race/ethnic category are difficult to interpret because this group consisted of less than 5% of the population. Blacks and Hispanics, lost significantly more in terms of home equity than non-home equity net worth. In addition, while on average, blacks and Hispanics lost similar proportions of their net worth, Blacks had the largest proportion of households that lost at least 50% of their net worth. These results reinforce the notion that African Americans and Hispanics were hit the hardest during the housing crisis. This is could also result from an interaction of residential segregation and neighborhood effects and the disportionate targeting of African Americans and Hispanics by predatory lenders and expensive, risky mortgage products.

Among owners and among renters, there is relatively little wealth mobility between 2007 and 2009. This accords with the findings above that suggest that changes in wealth, both positive and negative, were generally modest over the course of the Great Recession. While some households had very large losses or gains, they were very much in the minority. Three fourths of all households found themselves in the same wealth quintile in 2009 as in 2007. Transitions of two quintiles were very rare and of three quintiles or more were nonexistent. The wealth distribution of the U.S., both among renters and among owners, is markedly stable.

The owned home is the cornerstone of homeowners balance sheets and the investment of choice for those households with stocks of assets. Because of the concentration of assets in the home and the minimal exposure of most homeowners to financial asset markets, the wealth of homeowners tracks the wealth of their home closely. While this exposes them to risk in when home prices drop, the historic stability of prices and the natural floor value of the home and its land my act as a cushion against larger magnitude loss.

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Figure 1. Components of Net worth

Assets			Debts	
Liquid	Checking Savings		Credit	Credit cards Other consumer debt
Housing	House value		Housing	Mortgage(s)
Physical	Other property Business Cars Other vehicles		Other physical	Debt to business Car(s) Other vehicles
Financial	Mutual funds CDs Savings bonds Other bonds Stocks Brokerage accts. Annuities		Education	Student debt
Retirement	IRA 401(k) Pension		Misc.	Other lines of credit Margin loans Other
Misc.	Life insurance Personal debt owed Business debt owed Other (Cash, valuables)			
Net worth=total assets-total debts				

Table 1. Sample Sizes

category	approx sample
overall	3728
Owners	2384
Renters	1344
Among owners	
Race	
white	2125
black	264
hispanic	165
other	111
Wealth	
bottom 20	55
20-40	420
middle 40	658
60-80	747
top 20	784

Figure 2. Patterns of asset holding by wealth

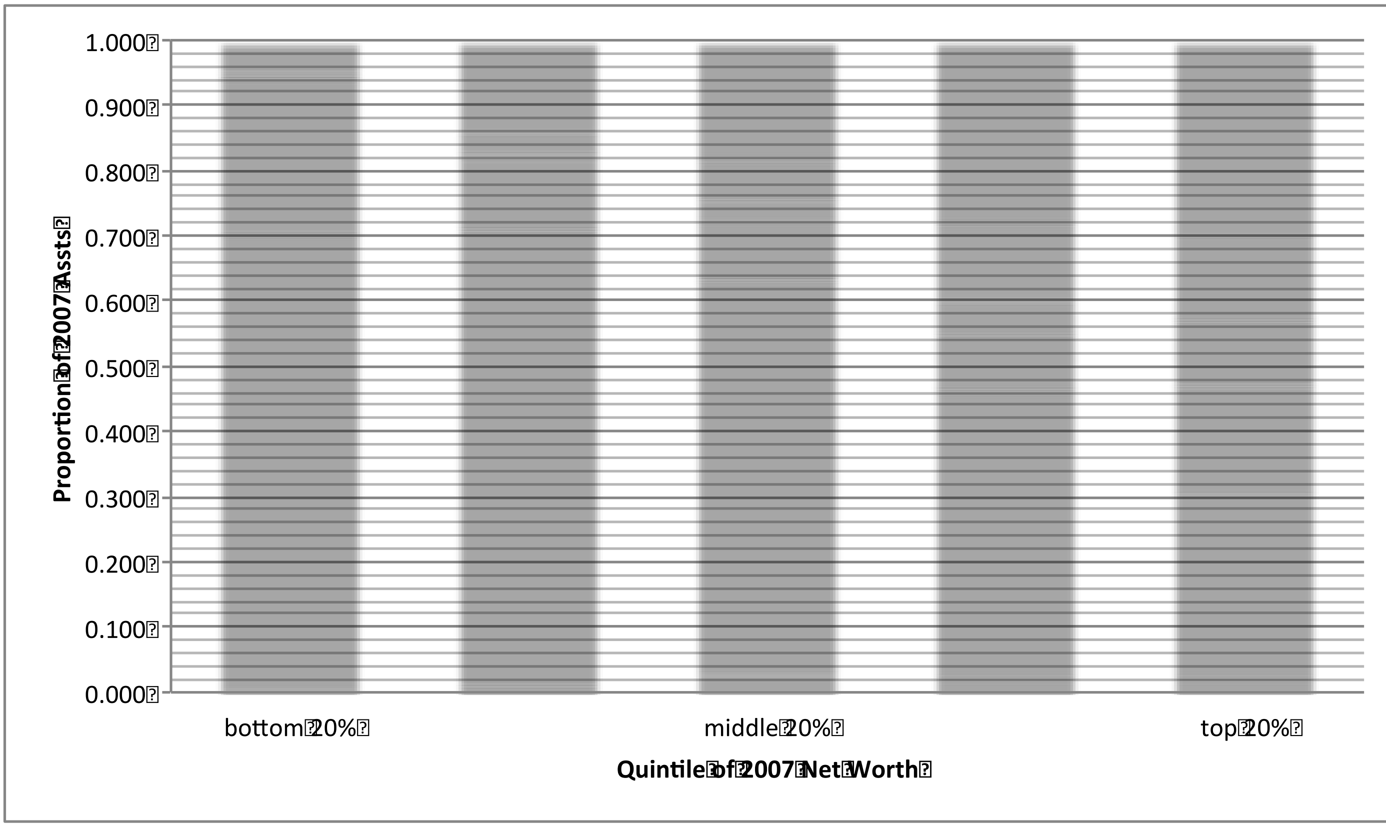


Table 2 Typical Homeowners 2007, change, 2009 balance sheet

typical owners

Mean of households between 25th and 75th percentiles of change in net worth

2007

Assets		Debts	
Liquid	$11,979	Credit	$4,393
Housing	$201,799	Housing	$76,716
Other Physical	$52,203	Other Physical	$11,333
Financial	$26,946	Education	$3,171
Retirement	$48,986	Misc	$2,055
Misc.	$122,053		
Total	$463,966		$97,668
Net worth		$366,298	

Change 2007-2009

Assets		Debts	
Liquid	$656	Credit	$264
Housing	-$29,255	Housing	-$6,966
Other Physical	-$2,018	Other Physical	$4,717
Financial	-$2,323	Education	$837
Retirement	-$4,639	Misc	$6
Misc.	-$3,308		
Total	-$40,887		-$1,143
Net worth		-$39,744	

2009

Assets		Debts	
Liquid	$12,635	Credit	$4,656
Housing	$172,544	Housing	$69,750
Other Physical	$50,185	Other Physical	$16,050
Financial	$24,624	Education	$4,008
Retirement	$44,346	Misc	$2,061
Misc.	$118,745		
Total	$423,079		$96,525
Net worth		$326,554	

typical owners

Median

2007

Assets		Debts	
Liquid	$6,000	Credit	$250
Housing	$205,000	Housing	$72,000
Other Physical	$25,000	Other Physical	$0
Financial	$500	Education	$0
Retirement	$17,000	Misc	$0
Misc.	$75,000		
Total	$498,800		$95,999
Net worth		$382,890	

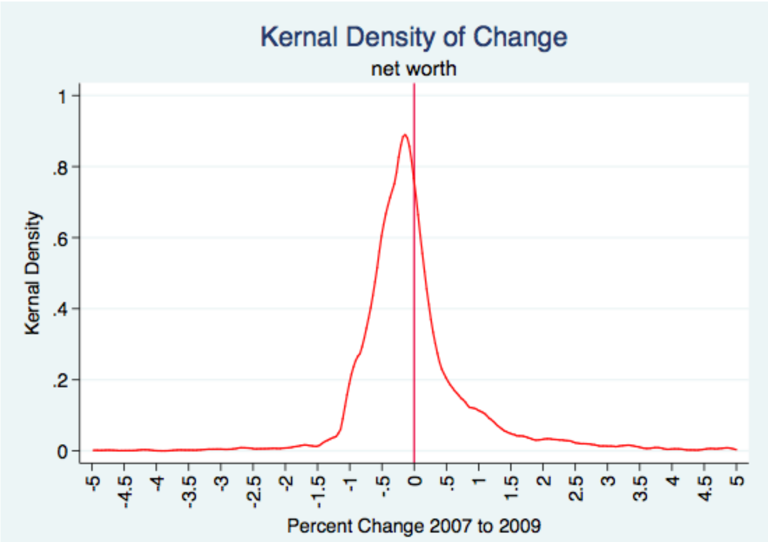
Change 2007-2009

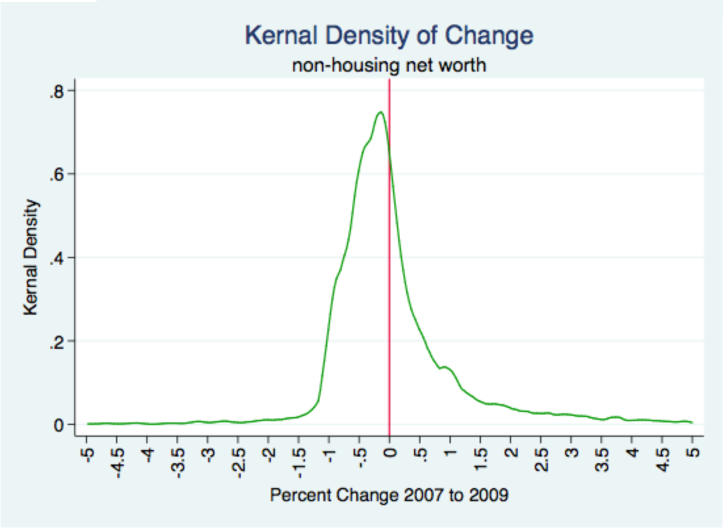
Assets		Debts	
Liquid	$0	Credit	$0
Housing	-$17,000	Housing	$0
Other Physical	-$3,000	Other Physical	$0
Financial	$0	Education	$0
Retirement	$0	Misc	$0
Misc.	$0		
Total	-$31,300		$0
Net worth		-$33,780	

2009

Assets		Debts	
Liquid	$6,000	Credit	$0
Housing	$180,000	Housing	$60,000
Other Physical	$22,000	Other Physical	$0
Financial	$270	Education	$0
Retirement	$17,000	Misc	$0
Misc.	$75,000		
Total	$468,000		$86,499
Net worth		$347,041	

Figures 3-5. Kernal density plots of percent change in net worth, home equity, and non-housing net worth





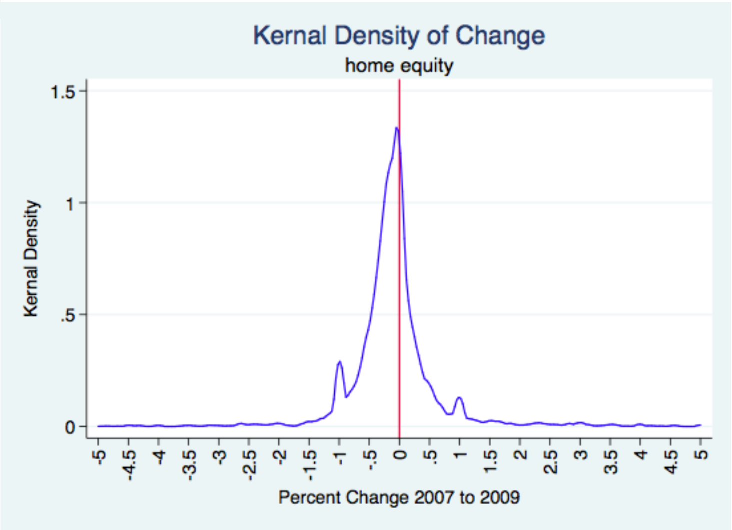


Figure 6. Percent Change in home equity and non-equity net worth by race

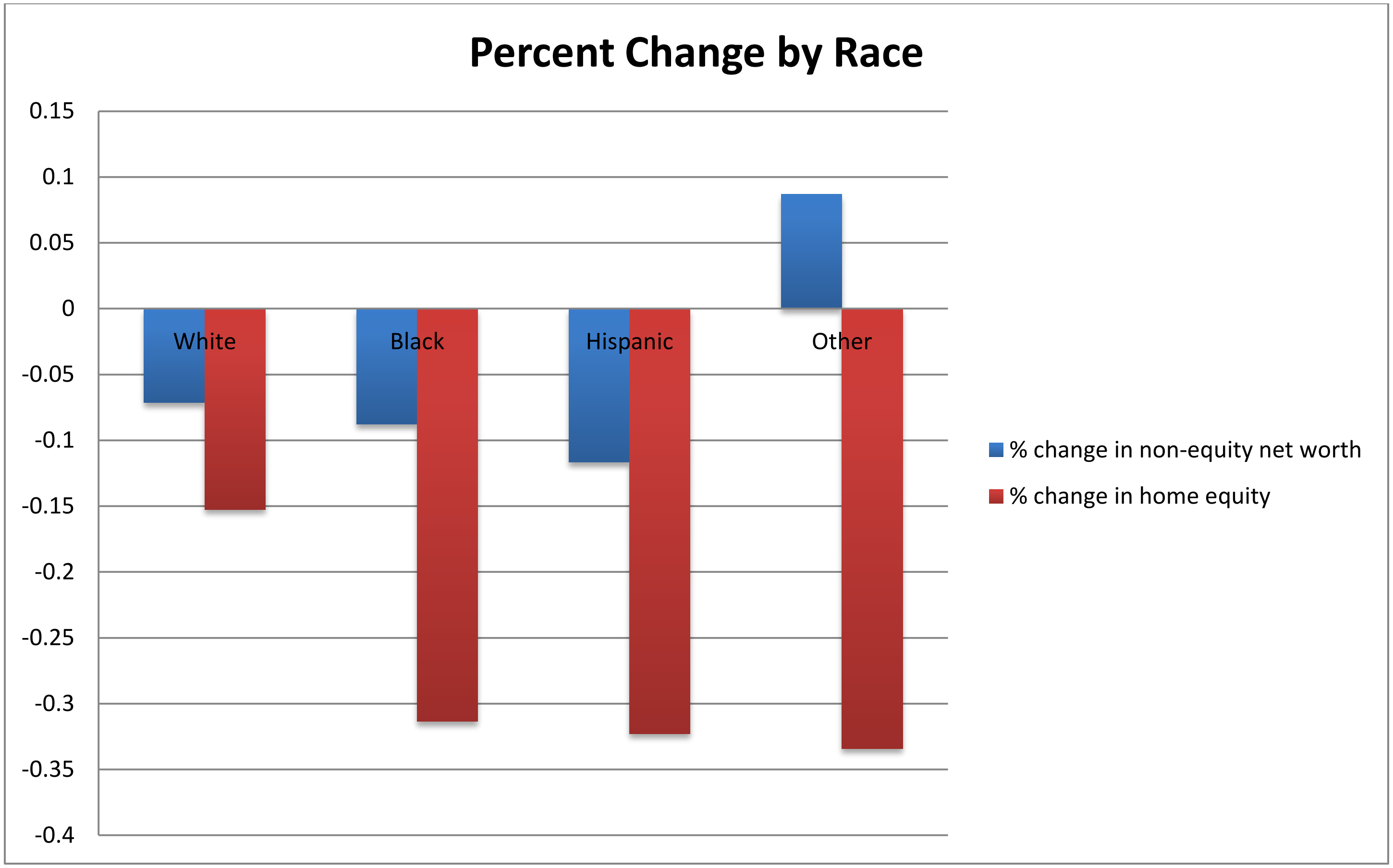


Figure 7. Proportion of households losing net worth, by race

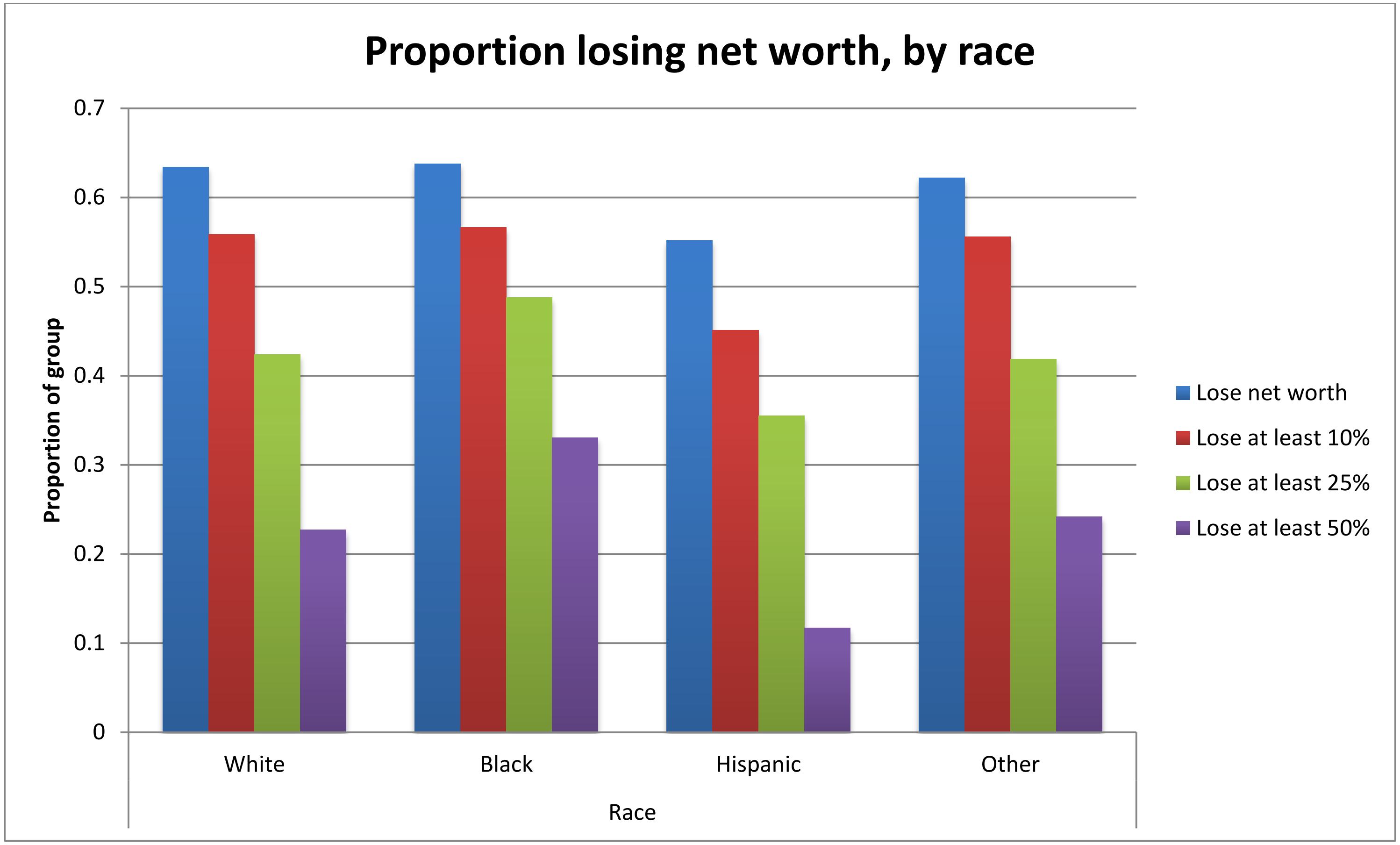


Table 3. Household Balance Sheets by Race

White

2007			
Assets		Debts	
Liquid	$13,400	Credit	$4,515
Housing	$202,294	Housing	$72,407
Other Physical	$56,822	Other Physical	$11,781
Financial	$31,416	Education	$3,239
Retirement	$54,087	Misc	$2,161
Misc.	$126,416		
Total	$484,434		$94,103
Net worth		$390,331	

Change 2007-2009			
Assets		Debts	
Liquid	$829	Credit	$414
Housing	-$25,051	Housing	-$5,240
Other Physical	-$2,900	Other Physical	$3,573
Financial	-$2,739	Education	$833
Retirement	-$4,993	Misc	$87
Misc.	-$3,872		
Total	-$38,727		-$333
Net worth		-$38,394	

2009			
Assets		Debts	
Liquid	$14,229	Credit	$4,929
Housing	$177,243	Housing	$67,167
Other Physical	$53,922	Other Physical	$15,354
Financial	$28,676	Education	$4,072
Retirement	$49,094	Misc	$2,247
Misc.	$122,544		
Total	$445,707		$93,770
Net worth		$351,938	

Black

2007			
Assets		Debts	
Liquid	$6,165	Credit	$2,833
Housing	$171,195	Housing	$68,464
Other Physical	$24,287	Other Physical	$7,284
Financial	$3,347	Education	$3,668
Retirement	$20,680	Misc	$142
Misc.	$106,638		
Total	$332,311		$82,392
Net worth		$249,920	

Change 2007-2009			
Assets		Debts	
Liquid	-$398	Credit	-$322
Housing	-$42,646	Housing	-$10,428
Other Physical	$4,586	Other Physical	$11,969
Financial	-$1,777	Education	$1,018
Retirement	-$3,092	Misc	$601
Misc.	$1,025		
Total	-$42,302		$2,838
Net worth		-$45,140	

2009			
Assets		Debts	
Liquid	$5,767	Credit	$2,511
Housing	$128,549	Housing	$58,036
Other Physical	$28,873	Other Physical	$19,253
Financial	$1,569	Education	$4,686
Retirement	$17,587	Misc	$743
Misc.	$107,663		
Total	$290,010		$85,230
Net worth		$204,780	

Figure 8. Change in networth by 2007 wealth, dollar change

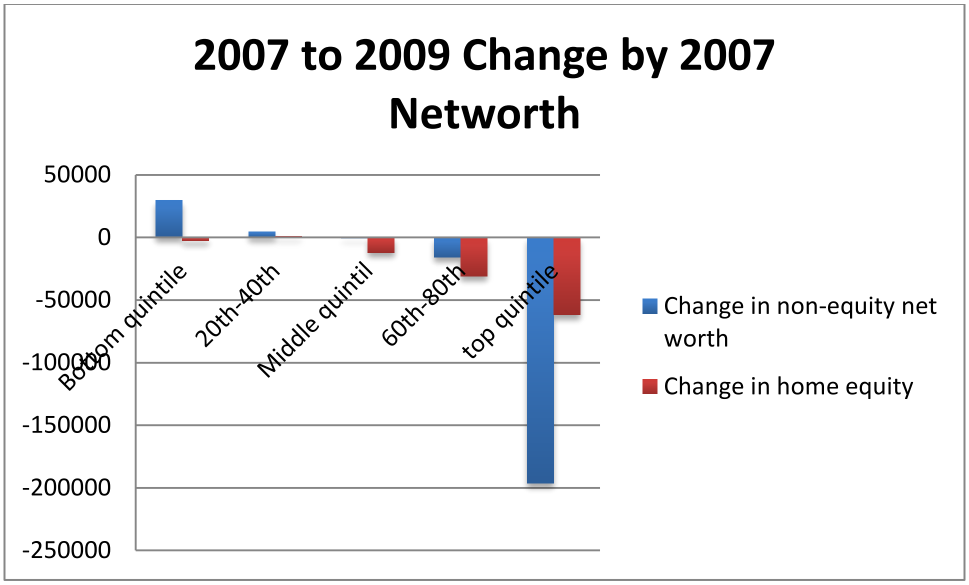


Figure 9. Change in net worth by 2007 wealth, percent change

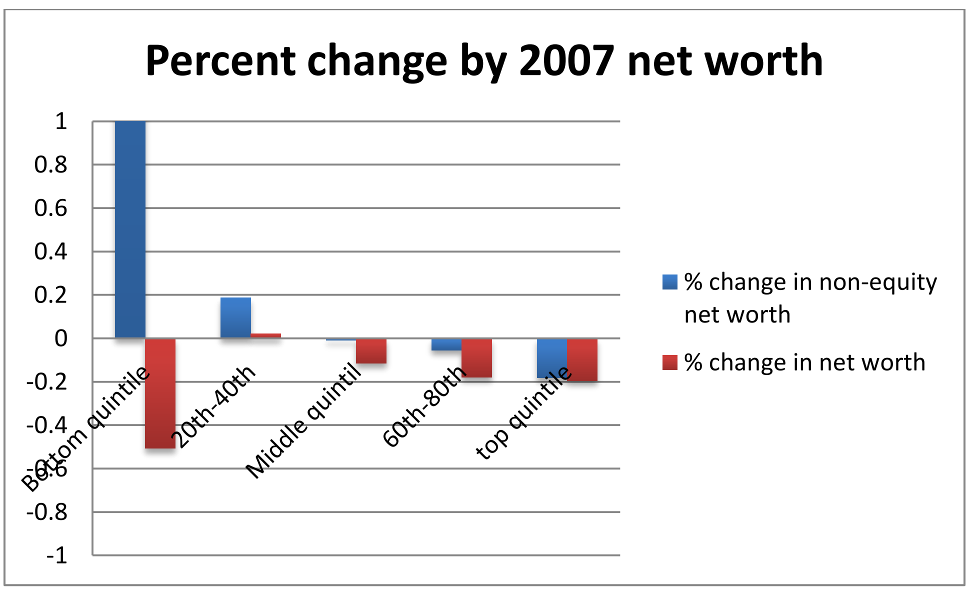


Table 4. Household balance sheets by 2007 wealth quintile

Bottom 20 %

2007

Assets		Debts	
Liquid	$1,205	Credit	$12,493
Housing	$98,118	Housing	$92,570
Other Physical	$33,282	Other Physic	$7,720
Financial	$549	Education	$9,341
Retirement	$1,511	Misc	$16,794
Misc.	$5,378		
Total	$140,043		$138,918
Net worth		$1,125	

Change 2007-2009

Assets		Debts	
Liquid	$145	Credit	-$7,986
Housing	-$20,445	Housing	-$17,635
Other Physical	-$18,356	Other Physic	-$1,230
Financial	-$84	Education	$230
Retirement	$820	Misc	-$16,794
Misc.	$21,377		
Total	-$16,544		-$43,414
Net worth		$26,870	

Middle 20%

2007

Assets		Debts	
Liquid	$8,407	Credit	$2,750
Housing	$158,711	Housing	$51,887
Other Physical	$23,090	Other Physic	$7,850
Financial	$8,644	Education	$1,697
Retirement	$16,289	Misc	$525
Misc.	$46,012		
Total	$261,153		$64,710
Net worth		$196,443	

Change 2007-2009

Assets		Debts	
Liquid	-$122	Credit	$528
Housing	-$16,350	Housing	-$4,175
Other Physical	-$2,295	Other Physic	$585
Financial	-$24	Education	$583
Retirement	$905	Misc	$24
Misc.	$2,447		
Total	-$15,440		-$2,455
Net worth		-$12,984	

Top 20%

2007

Assets		Debts	
Liquid	$43,162	Credit	$3,578
Housing	$442,576	Housing	$124,517
Other Physical	$261,858	Other Physic	$24,187
Financial	$157,599	Education	$3,587
Retirement	$206,240	Misc	$12,043
Misc.	$458,805		
Total	$1,570,239		$167,911
Net worth		$1,402,328	

Change 2007-2009

Assets		Debts	
Liquid	-$3,271	Credit	$865
Housing	-$72,673	Housing	-$10,818
Other Physical	-$42,957	Other Physic	$11,853
Financial	-$29,089	Education	$1,020
Retirement	-$43,042	Misc	-$1,671
Misc.	-$65,955		
Total	-$256,988		$1,249
Net worth		-$258,237	

Tables 5-7. Mobility for All, Owners, and Renters

All		2009 Wealth Quintile					
		0-20	20-40	40-60	60-80	80-100	total
2007 Wealth Quintile	0-20	15.6	3.6	0.7	0.1	0.0	20.0
	20-40	3.7	12.4	3.4	0.5	0.0	20.0
	40-60	0.5	3.6	13.0	2.9	0.0	20.0
	60-80	0.2	0.3	2.8	15.1	1.6	20.0
	80-100	0.0	0.0	0.0	1.6	18.4	20.0
	Total	20.1	19.9	20.0	20.0	20.0	100.0

All owners		2009 Wealth Quintile					
		0-20	20-40	40-60	60-80	80-100	total
2007 Wealth Quintile	0-20	2.0	1.2	0.2	0.0	0.0	3.5
	20-40	2.2	12.6	3.5	0.4	0.0	18.6
	40-60	0.4	4.4	16.5	3.4	0.0	24.7
	60-80	0.2	0.3	3.5	20.2	2.2	26.3
	80-100	0.0	0.0	0.1	2.0	24.7	26.8
	Total	4.8	18.6	23.8	25.9	26.9	100.0

All renters		2009 Wealth Quintile					
		0-20	20-40	40-60	60-80	80-100	total
2007 Wealth Quintile	0-20	49.70	9.70	1.70	0.20	0.00	61.40
	20-40	7.50	11.80	3.40	0.70	0.00	23.40
	40-60	0.90	1.50	4.20	1.50	0.00	8.10
	60-80	0.10	0.40	1.20	2.30	0.20	4.10
	80-100	0.00	0.00	0.00	0.50	2.50	3.00
	Total	58.20	23.40	10.50	5.10	2.70	100.00

Table 8. Comparing Owners to Renters.

Owners compared to renters	Owners	Renters
Median 2007 wealth	$382,890	$15,560
Median wealth change 2007 to 2009 (nominal)	-$33,780	$0
Median wealth change 2007 to 2009 (percentage)	-11.3%	-3.0%
Percentage who lost net worth	60.4%	49.0%
Percentage who lost at least 10%	51.2%	45.2%
Percentage who lost at least 25%	36.2%	40.3%
Percentage who lost at least 50%	17.3%	32.9%