



US2010

discover america in a new century

This report has been peer-reviewed by the Advisory Board of the US2010 Project. Views expressed here are those of the authors.

US2010 Project

John R. Logan, Director
Brian Stults, Associate Director

Advisory Board

Margo Anderson
Suzanne Bianchi
Barry Bluestone
Sheldon Danziger
Claude Fischer
Daniel Lichter
Kenneth Prewitt

Sponsors

Russell Sage Foundation
American Communities Project
of Brown University

Home Ownership's Wild Ride, 2001-2011

Emily Rosenbaum
Fordham University

March 2012

Report Abstract

Home ownership is a cornerstone of the American Dream for the economic and social benefits it conveys, but the past decade was a nightmare of foreclosures and inaccessibility for some groups. By 2011, the ownership gaps between black and white households, poor and rich households, less-educated and more-educated households widened considerably compared to the situation a decade earlier. In addition, America's younger generations have had greater financial obstacles to homeownership than did previous generations at the same stage in life: a fate unlikely to change soon.

Home ownership is the most widely used measure of housing well-being in the United States: Attaining it is equated with “making it,” or with fulfilling the “American Dream.” The importance of home ownership in the American imagination derives from the array of social and economic benefits it potentially confers upon households. Ownership is associated with access to important neighborhood amenities – such as good schools and safe environments – that are important components for family well-being and children’s future socioeconomic success (Rosenbaum and Friedman 2007). Home ownership also confers important tax benefits, and, because an owned home typically constitutes the vast majority of all asset wealth held by a household (Taylor et al. 2011), it serves as an avenue for asset appreciation (Flippen 2010) – at least when home values and equity rise. Because home ownership has the potential to convey a broad range of important benefits, trends and disparities in ownership are a key component of patterns of inequality in U.S. society.

Key Findings

- Between 2001 and 2011, the overall home ownership rate dropped by one percentage point. However, this small net change masks a general rise in ownership that peaked in 2005 and fell after that. For certain kinds of households – the least-educated, poorest, and non-Hispanic black households – the first half of the decade brought little, if any, growth while the second half of the decade resulted in devastatingly large losses. As a result, the gaps in ownership separating black from white households and households at the top and bottom of the education and income distributions widened considerably in this decade.
- The housing market collapse and ensuing Great Recession during the second half of the last decade also had a disproportionate impact on young adults, who typically begin the transition to home ownership in their late twenties and early thirties. In particular, Generation X (ages 25-34 in 2001) had the misfortune to pass a life-course stage typified by steep inclines in ownership during a period when becoming and remaining a homeowner was fragile. Generation Y (ages 25-34 in 2011), the most recent cohort to launch its housing career, is likely to fare even worse, as it faces numerous obstacles to entering the ownership market. Absent a dramatic shift in the economy and the housing market, the stalled progress of these cohorts threatens to have a permanent impact.

Background

During the 1990s, blacks and Hispanics narrowed the home ownership gap with whites, and similar gains were made by households in the first through fourth income quintiles relative to the most affluent households (Bostic and Surette 2001; Cortes et al. 2007). At least part of the gains observed in the 1990-2000 decade derived from policies implemented by the Clinton Administration aimed at raising the ownership levels of households who had long been underserved by conventional mortgage market, i.e., low- and moderate-income and minority households (Masnick 2001; Saegert, Fields, and Libman 2009; Shlay 2006; but see Gabriel and Rosenthal [2005]).

The overall home ownership rate continued to rise in the early years of the 21st century, peaking in 2004 (Kochhar, Gonzalez-Barrera, and Dockterman 2009; Schwartz 2010), yet

destabilizing changes in the mortgage market undermined the potential for additional consistent growth. The engines of the foreclosure crisis included deregulation of the financial services industry; growth in first-lien subprime loans after 2002; the expansion of predatory tactics that targeted vulnerable populations with loans they neither could understand nor afford; and the proliferation of such “exotic” mortgage products as interest-only and payment-option loans within the conventional mortgage market (Immergluck 2009; Wolff, Owens and Burak. 2011).

Because neither predatory lending nor the effects of the foreclosure crisis have been neutral with respect to race/ethnicity and socioeconomic status (Allen 2011; Engel and McCoy 2008; Wolff, Owens and Burak 2011), investigating trends in ownership for different social groups, and how these trends differed *between* these groups, over the last decade is of critical importance. Indeed, recent research has shown that while the overall home ownership rate was rising, the least affluent households suffered a *drop* in home ownership by slightly more than one percentage point between 2000 and 2006 (Bostic and Lee 2007). Moreover, published estimates indicate that the overall home ownership rate fell each year from 2005 to 2008, but that blacks and native-born Hispanics suffered the largest absolute losses during that period (Kochhar, Gonzalez-Barrera, and Dockterman 2011). Uneven patterns of loss have contributed to the growth in wealth inequality during the 2000s, especially the dramatic losses in wealth among blacks and Hispanics, whose wealth portfolios are less diversified and more dependent on home ownership than are those of whites (Taylor et al. 2011; Wolff, Owens, and Burak 2011).

This report adds to our growing knowledge about the consequences for households of the housing market crisis that began midway through the last decade. The analysis is based on six years of data from the March Current Population Survey (CPS; 2001, 2003, 2005, 2007, 2009, and 2011), and thus captures the periods immediately before and after the housing bubble’s burst. The CPS is a nationally representative, monthly survey of over 70,000 households; the March survey contains the Annual Social and Economic Supplement (formerly the Annual Demographic Supplement), allowing a detailed analysis of home ownership trends according to several key social and economic characteristics. The analytical sample is limited to non-Hispanic white, non-Hispanic black, non-Hispanic Asian,¹ and Hispanic households (which can be of any race, or any combination of races), omitting Native American households and non-Hispanic households that report more than one race. As a result, the estimates of ownership for all households combined that are reported here will differ slightly from those based on more-inclusive samples, such as those published by the Census Bureau (e.g., <http://www.census.gov/hhes/www/housing/hvs/annual10/ann10ind.html>). In the combined sample the majority of households are non-Hispanic white (69.9 percent), followed by Hispanic (13.0 percent), black (12.7 percent), and Asian (4.5 percent). All analyses were weighted using a scaled-down version of the Supplement Household Weight (the weight is scaled down to remove the design effects of sampling but to maintain unweighted cell sizes).

The current report differs from previous efforts (e.g., Kochhar, Barrera-Gonzalez, and Dockterman 2009) in a number of ways. First and foremost, by including the 2011 estimates of home ownership, this report provides a more up-to-date picture of the consequences of the housing market crisis, and how the burden of these consequences continues to disproportionately

¹ These groups include only those individuals who report a single race. The terms “white,” “black” and “Asian” are used throughout the text to refer to non-Hispanic households belonging to each (single) racial group.

affect certain social groups. Second, this report examines trends for all households according to a broader variety of sociodemographic and economic characteristics, all of which are correlates of ownership. Finally, this report uses multivariate techniques to isolate trends for specific kinds of households net of the influence of other factors.

The primary focus of this report is on the variation in trends across different important divisions in U.S. society: race/ethnicity, education, and income. The report also examines generational (or cohort) differences. To do this requires special methods because people's age changes from year to year. Trends for 10-year age groups that rely on observations made every two years are distorted by "compositional shifts" (Myers 2005) that arise as the members of each age group progressively shift into the next older age group. These compositional shifts become more pronounced over time, and are complete at 10 years. To escape the potential for misleading comparisons across age, I utilize a cohort comparison, comparing the home ownership experiences of different birth cohorts in 2001 and 2011 with those of their immediate cohort "neighbors" at the same stage of the life course.

Trends in Home Ownership: All Households and by Race/Ethnicity, Education and Income

Table 1 presents the proportion of all households that own their homes for each survey year, and repeats this information for households classified according to the householder's race/ethnicity and level of educational attainment, and the household's location in the household income distribution. These stratification variables played key roles in the targeting of subprime and other risky mortgages, and thus require primary attention. The data in Table 1 allow us to assess trends over time for each subgroup and make comparisons across subgroups.² Numbers in superscripts for each cell indicate whether the value in that year is significantly different (at the .10 level) from other years (a superscript of 1, for instance, means that the value is significantly different from the value in 2001). Table 1 also includes ratios that compare each subgroup to the most advantaged subgroup on every characteristic, which makes it easier to see how disparities evolved over time.

Looking first at Panel A of Table 1, the level of home ownership for all households in this sample rose steadily until 2005, when nearly 70 percent of households in the sample owned their homes. After this date, as the foreclosure crisis gripped the nation, home ownership dropped, reaching a level in 2011 that was significantly *lower* than the level in 2001 (66.45 percent versus 67.94 percent, respectively).

These data are disaggregated by race/ethnicity, education, and income in Panels B, C, and D. There are not surprisingly large differences across subgroups in 2001: non-Hispanic whites, people with advanced degrees, and people in the fifth quintile (upper 20 percent) of income were by far the most likely to own a home. I focus on how these differences changed during the

² Significance tests for differences between years (to identify trends) and tests for significant differences between categories of race/ethnicity, educational attainment, and household income quintile (not shown) were performed using the Tukey posthoc test.

Table 1: Trends in home ownership among U.S. households, and measures of group disparities, according to selected household characteristics, 2001-2011

Characteristic	Year					
	2001	2003	2005	2007	2009	2011
A. All	0.6794 ^{5,11}	0.6847 ^{5,8,11}	0.6941 ^{1,3,7,8,11}	0.6846 ^{5,8,11}	0.6748 ^{3,5,7,11}	0.6645 ^{1,3,5,7,9}
B. Householder race/ethnicity						
White	0.7455 ⁵	0.7521 ^{5,11}	0.7618 ^{1,3,7,8,11}	0.7522 ^{5,11}	0.7467 ^{1,5}	0.7403 ^{3,5,7}
Black	0.4832 ¹¹	0.4841 ¹¹	0.4961 ^{9,11}	0.4901 ^{9,11}	0.4692 ^{5,7,11}	0.4459 ^{1,3,5,7,9}
Hispanic	0.4561 ^{5,7,8}	0.4758	0.4923 ^{1,11}	0.4931 ^{1,11}	0.4786 ¹	0.4659 ^{5,7}
Asian	0.5343 ^{5,7,8,11}	0.5684	0.5960 ¹	0.5979 ¹	0.5868 ¹	0.5783 ¹
Ratios						
white/black	1.54	1.55	1.54	1.53	1.59	1.66
white/Hispanic	1.63	1.58	1.55	1.53	1.56	1.59
white/Asian	1.40	1.32	1.28	1.26	1.27	1.28
C. Householder educational attainment						
Less than high school	0.5547 ^{7,8,11}	0.5602 ^{7,8,11}	0.5537 ^{9,11}	0.5369 ^{1,3,8,11}	0.5121 ^{1,3,5,7}	0.5029 ^{1,3,5,7}
High school diploma (or equiv.)	0.6858 ^{7,8,11}	0.6744 ¹¹	0.6825 ^{9,11}	0.6739 ^{1,11}	0.6635 ^{1,5,11}	0.6512 ^{1,3,5,7,9}
Some college (no degree)	0.6680 ^{9,11}	0.6613 ^{9,11}	0.6729 ^{9,11}	0.6593 ^{9,11}	0.6444 ^{1,3,5,7}	0.6310 ^{1,3,5,7}
2-year degree	0.7093 ^{3,5}	0.7342 ^{1,8,11}	0.7545 ^{1,7,8,11}	0.7236 ^{5,11}	0.7136 ^{3,5,11}	0.6919 ^{3,5,7,9}
4-year degree	0.7248 ^{3,5,7,9}	0.7517 ^{1,11}	0.7588 ^{1,8,11}	0.7538 ^{1,11}	0.7441 ^{1,5,11}	0.7306 ^{3,5,7,9}
Advanced degree	0.7921 ⁵	0.8005	0.8120 ^{1,11}	0.8021	0.7965	0.7884 ⁵
Ratios						
adv./< h.s. diploma	1.43	1.43	1.47	1.49	1.56	1.57
adv./h.s. dip. or equiv.	1.15	1.19	1.19	1.19	1.20	1.21
adv./some college	1.19	1.21	1.21	1.22	1.24	1.25
adv./2-yr degree	1.12	1.09	1.08	1.11	1.12	1.14
adv./4-yr. degree	1.09	1.06	1.07	1.06	1.07	1.08
D. Household income quintile¹						
First quintile	0.4866 ^{7,8,11}	0.4877 ^{7,8,11}	0.4945 ^{7,8,11}	0.4650 ^{1,3,5,11}	0.4631 ^{1,3,5,11}	0.4411 ^{1,3,5,7,9}
Second quintile	0.5908 ¹¹	0.5949 ^{9,11}	0.5916 ¹¹	0.5975 ^{9,11}	0.5797 ^{3,7}	0.5710 ^{1,3,5,7}
Third quintile	0.6855 ⁵	0.6853 ⁵	0.7051 ^{1,3,8,11}	0.6933	0.6881 ⁵	0.6828 ⁵
Fourth quintile	0.7895 ^{5,7}	0.7971 ^{5,11}	0.8120 ^{1,3,8,11}	0.8091 ^{1,11}	0.7979 ^{5,11}	0.7841 ^{3,5,7,9}
Fifth quintile	0.8729 ^{3,5,7}	0.8840 ^{1,5}	0.9005 ^{1,3,8,11}	0.8923 ^{1,9,11}	0.8814 ^{5,7}	0.8780 ^{5,7}
Ratios						
Q5/Q1	1.79	1.81	1.82	1.92	1.90	1.99
Q5/Q2	1.48	1.49	1.52	1.49	1.52	1.54
Q5/Q3	1.27	1.29	1.28	1.29	1.28	1.29
Q5/Q4	1.11	1.11	1.11	1.10	1.10	1.12

Note: Significance is assessed at p<=.10 level, using the Tukey posthoc test. For tests of differences across years, each number indicates a statistically significant difference relative to the indicated year (i.e., 1 = 2001, etc.).

¹ The household income deciles were computed for each survey year separately.

decade. From the popular media, one would have the impression that there was a major shift toward previously disadvantaged groups as financing policies during the “boom in homeownership” were relaxed in their favor. This is not the case. Blacks, people without college education, and people in the lower 40 percent of the income distribution did not share equally in the pre-2005 gains in ownership. (Note that the significance tests for these subgroups show no difference between ownership rates in 2003 and 2005 compared to 2001.)

This table also shows that while no subgroup was spared from the general downturn in home ownership after 2005, the magnitude of loss varied considerably. The same three subgroups – the least-educated, least-affluent, and black households – incurred the largest losses by 2011, despite the fact that they had no discernable gains during 2001-2005. So they were left with lower ownership levels than they started the decade with. Compared to 2001 households in the bottom quintile and those headed by high school dropouts suffered the largest losses (4.5 and 5.2 points, respectively), while the black ownership rate dropped by almost four (3.7) points. In contrast, better-educated, more affluent, white, and Hispanic households ended the decade with ownership rates approximately equal to those in 2001. Only Asian households enjoyed a *net gain* in ownership (approximately 4.5 percentage points), rising strongly through 2007 and then dropping back modestly.

A key consequence of these varying trends in home ownership over the decade is that some group disparities narrowed while others widened considerably. Specifically, Hispanics were able to make additional progress in closing the home ownership gap with whites, continuing the relative gains earned in the 1990s (Kochhar, Gonzalez-Barrera, and Dockterman 2009), and Asians made up for limited earlier progress in closing the gap with whites by narrowing it by 12 points (or 8.6 percent). The rapidly declining fortunes of black households, however, *deepened* the white/black gap by 12 points, or about 7.8 percent, thereby *reversing* longer-term gains. Similarly, the ownership gap separating the least- from the most-educated households grew by 14 points (or 10 percent) over the decade, and the gap between households in the top and bottom quintiles grew by an astounding 20 points (or 25 percent). In contrast, the differences separating holders of two- and four-year college degrees from holders of advanced degrees, and households in the top two quintiles, barely shifted. The sharp rise in ownership inequality by education and income is consistent with findings of heightened family income segregation during the 2000 to 2007 period, reported in an earlier US 2010 brief by Sean Reardon and Kendra Bischoff (2011).

The divergent experiences of blacks and Hispanics, coupled with the dramatic losses suffered by blacks after 2007, caused the latter group to emerge at the end of the period with a statistically *lower* home ownership rate relative to Hispanics. Thus, while Hispanics began the decade with the lowest level of home ownership among the four major racial/ethnic groups, by decade’s end blacks’ ownership levels had fallen so far that this group replaced Hispanics in the bottom rank.

Home Ownership Trends for Different Cohorts

The inextricable relationship between age and time complicates the evaluation of home ownership trends for different age groups. Unlike the other characteristics examined, which do not evolve uniformly over time, members of a given age group – and thus birth cohort — inevitably mature and progress through the life course, carrying with them their history of advantage or disadvantage.

Myers (2005), in an earlier analysis of cohort trends in home ownership, finds that Generation X “launchers” in 2000 (aged 25 to 34) were faring better at the start of their housing careers than 25- to 34-year-olds had fared in 1990 (who are referred to as the Late Baby Boom cohort). That is, Generation X achieved a higher level of home ownership (about 47 percent for ages 25-34 in 2000) than did members of the Late Baby Boom at the start of their housing career (about 44 percent for ages 25-34 in 1990),³ largely because of the range of factors that made the 1990s a favorable environment for entering the ownership market. We now look at how the last decade affected Generation X and consider the implications for the upcoming Generation Y (people who became 25-34 in 2011).

Table 2 shows rates of homeownership in 2001 and 2011 for age groups (along the rows) and birth cohorts (along the diagonals). The data for each year (reading down each column) show that ownership levels are low in very early adulthood (ages 15-24), but rise sharply – by more than 40 points — to the age range 35-44, and more modestly thereafter. Increases in ownership up to the 45-54 age range mirror changes in the life course, such as family-related decisions (marriage/partnership, raising children) and occupational achievements that influence the choice to own a home (Rosenbaum and Friedman 2007). Changes in the life course after age 55, such as becoming an empty nester or retirement, tend to militate against additional increases in ownership. While we expect to see the same general pattern of age-related changes for each birth cohort, historical circumstances determine the size of age-related changes in ownership, and thus the differences across cohorts at similar ages.

Reading along the diagonals, the information in Table 2 addresses how each *cohort's* ownership rate fluctuated during the decade; reading along the rows addresses how cohorts fared relative to their immediate predecessors at the same age range/life-course stage. As expected, each birth cohort experienced rising levels of ownership between 2001 and 2011 consistent with changes in the life course as individuals age (data in the diagonals). For example, members of Generation X saw their ownership rates rise from nearly 48 percent when they launched in 2001 at ages 25-34 to nearly 64 percent when they reached age group 35-44 in 2011. However, when we compare the *relative* progress made by different birth cohorts at the same life-course stage, we see that the housing and economic problems of the last decade prevented cohorts from matching the successes scored 10 years earlier by their immediate predecessors. Specifically, members of four birth cohorts – Generation Y, Generation X, the Late Baby Boom, and the Early Baby Boom – were statistically *less likely* to own homes in 2011 than did the members of the next oldest cohort at the same age in 2001 (data in the rows).

³ These figures are calculated by the author using data published by the Census Bureau at <http://www.census.gov/hhes/www/housing/hvs/historic/files/histtab15.xls>.

Table 2: Home ownership rates of birth cohorts, 2001 and 2011

Age	2001	2011	Cohort label
15-24	0.2186	0.2081	
25-34	0.4779	0.4255	Generation Y
35-44	0.6829	0.6394	Generation X
45-54	0.7668	0.7279	Late baby boom
55-64	0.8126	0.7849	Early baby boom
65-74	0.8288	0.8241	World War II
75 and older	0.7712	0.7910	Parents (late) baby boom

Note: Differences across years for age groups are all statistically significant (at $p \leq .10$) except for age 15-24 and 65-74.

Two life-course stages deserve special attention. The first is launching, which occurs during the 25-34 age range. The data in Table 2 reveal that members of Generation Y are at a statistically significant disadvantage relative to members of Generation X at the start of their housing careers. At ages 25-34 in 2011, 42.55 percent of Generation Y members owned their homes, a level more than five points below that of Generation X at the same age in 2001 (47.79 percent). Generation X was advantaged at launching in the 1990s relative to both its immediate predecessor (the Late Baby Boom) and its immediate successor (Generation Y), having entered the housing market at a most propitious time.

The second stage, as people reach ages 35-44, is theoretically characterized by a steep rise in ownership. Members of the Late Baby Boom were fortunate to experience the favorable conditions of the 1990s at this stage, and thus saw their ownership levels rapidly increase between 1990 and 2000 (Myers 2005). Generation X, however, passed through this life-course stage during the collapse of the housing market and the Great Recession; as a result, its ownership rate at ages 35-44 (64 percent) fell significantly below that achieved by the Late Baby Boom at the same age by more than four points. Thus, although the Late Baby Boom began its housing career (in 1990) at a lower level than did Generation X, the favorable economic and housing conditions during the 1990s coincided with a critical stage of the life course, enabling a steeper rise in ownership between 25-34 and 35-44 than turned out to be possible for Generation X 10 years later. As a result, Generation X fell behind the Late Baby Boom, achieving a lower level of home ownership at the same life-course stage.

The housing market has thus far shown no evidence of recovering the kind of growth that prevailed during the 1990s. It is unlikely that Generation X will be able to regain its lost ground, as the rise in ownership typically flattens from age 45 onwards (Myers 2005). Similarly, current

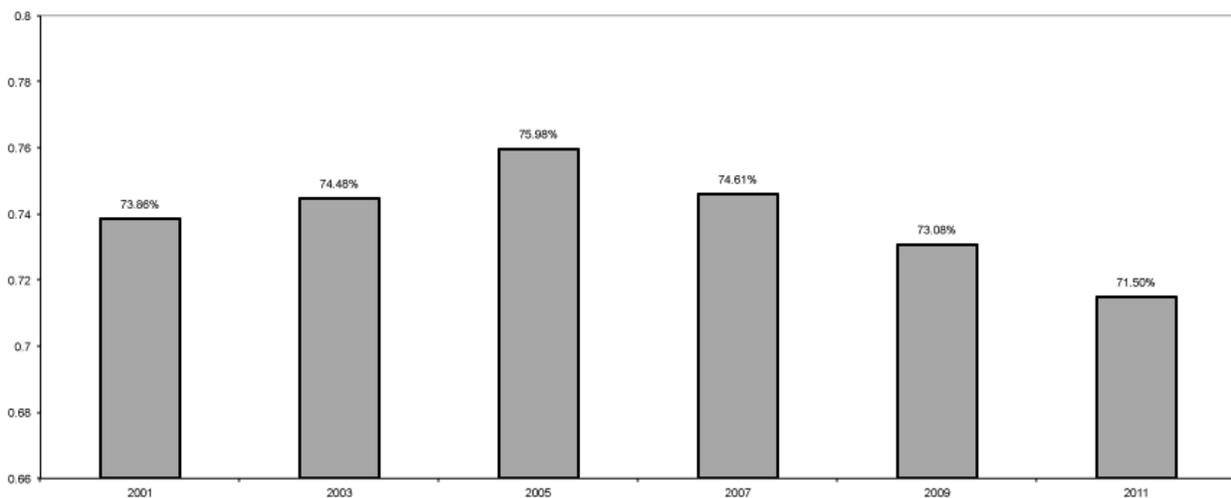
conditions will likely keep Generation Y (which is currently working its way towards reaching 35-44) from recovering from its poor start. Without strong recoveries for the economy and housing market in the very near future, the stalled progress of Generation X and younger cohorts, when combined with their size (Myers 2005, Table 2), will hamper future increases in the overall ownership rate.

Trends from a Multivariate Perspective

Thus far the analysis has focused on trends in ownership for individual household characteristics, and has shown that certain subgroups of households – blacks, the least educated and least affluent – have experienced the greatest, and in fact *net*, losses since 2005. Newer cohorts have suffered in relation to the experience of earlier cohorts. Yet because all the household attributes examined here are related to one another to varying degrees, multivariate analysis is necessary to determine which variables are associated with losses or gains in ownership independently of their association with other variables.

To answer these questions, four multivariate models predicting home ownership were estimated. The first of these models was estimated using the entire data set, and thus reveals the “net” effect of survey year after controlling for the full range of other predictors. The remaining three models were estimated for 2001, 2005, and 2011 separately. They provide insight into the independent association between ownership and individual correlates and how these change over the decade. The full results from all four models are shown in Appendix Table A1. For the purposes of the discussion I use the results from these models to estimate predicted ownership rates under different scenarios.⁴

Figure 1: Predicted home ownership rates, 2001-2011



Note: All predicted rates are calculated keeping all variables except for survey year constant at their mean. Full results of the logistic regression upon which the predicted rates are based are shown in Appendix Table A1.

⁴ All predicted probabilities are calculated keeping all variables, apart from the one under study, constant at their mean values.

Using the results from the pooled logistic regression (first column of Appendix Table A1), I calculated predicted ownership rates for each survey year, holding all other predictors of home ownership held constant. The changes in predicted rates over time in Figure 1 likely reflect the influence of macro-level factors, including the policy environment. Specifically, between 2001 and 2003, a period preceding the proliferation of first-lien subprime mortgages and the explosion of other “exotic” mortgages such as “no-doc” loans, the predicted home ownership rate rose, but by a relatively mild 0.8 percent. Between 2003 and 2005, when home purchases were being fueled by free-flowing loans, the predicted rate rose an additional 2 percent. The year-to-year declines in the predicted rates after 2005 grew in size from 1.8 percent between 2005 and 2007 to almost 2.2 percent between 2009 and 2011. In total the predicted ownership rate dropped by 6.3 percent after 2005, a larger drop than was observed in Table 1 (4.3 percent).

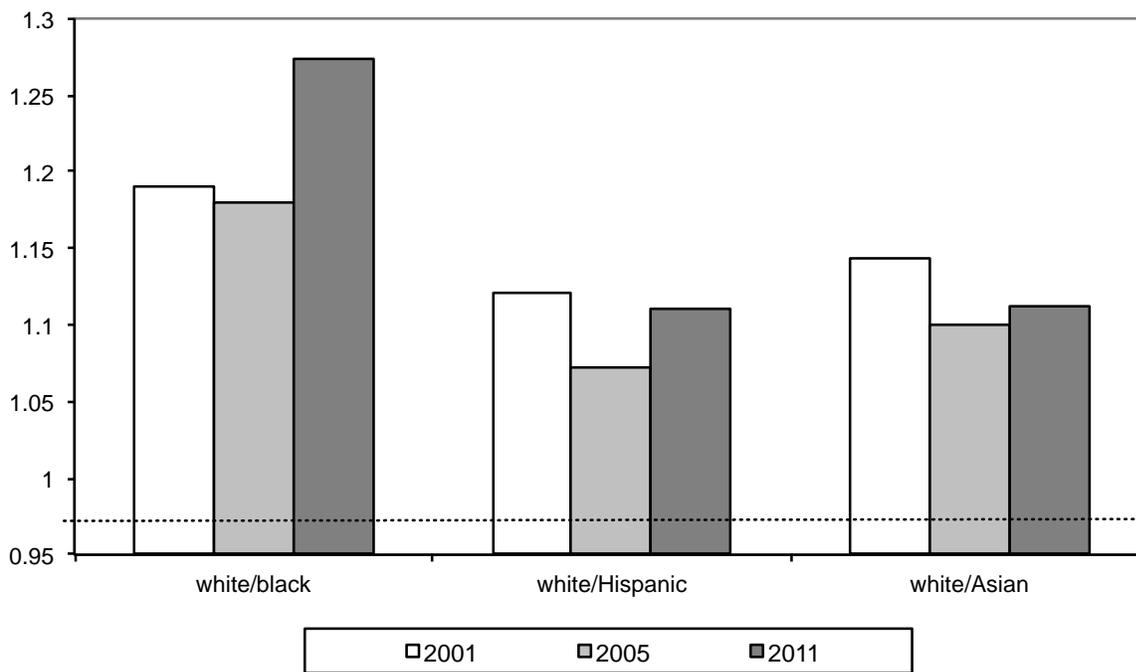
The macro-level factors that underlie the net effects of time also seem to be related to differences, over time, in the way other factors influence ownership. Reflecting the increasing stratification by race/ethnicity, education, and income over the period (Table 1), the relative odds of ownership for Black households, and the least-educated and least-affluent households decline over time (Appendix Table A1, second through fourth columns). Using the results from the logistic regressions predicted for 2001, 2005, and 2011, I calculated predicted rates for each year varying the values of predictors, and used these predicted values to create the “true” trends that arise net of the influence of other covariates. We can use predicted rates for these key stratification variables – householder race/ethnicity and educational attainment, and household income quintile – to understand the true nature of shifting patterns of inequality. Figures 2, 3 and 4 present ratios of predicted rates similar in construction to those in Table 1, for these three variables.

As would be expected, the inequalities implied by the multivariate models (Figures 2, 3 and 4) are smaller than those evident at the bivariate level (Table 1); thus controlling for the other covariates accounts for some portion of the observed inequalities. However, the extent to which this narrowing occurs varies across the three key sources of inequality, as well as across categories within each variable. For example, the fact that this narrowing is nearly complete only in the case of educational attainment (Figure 3) points to the unique and growing strength of race/ethnicity and income as independent sources of rising inequality.

Although at the bivariate level the white/black gap in home ownership was midway between the white/Hispanic and white/Asian gaps (Table 1), the predicted white/black gap is far larger than the other two at each date, and especially in 2011 (Figure 2). That blacks emerge far more disadvantaged in attaining home ownership net of the influence of other variables is a common finding in the literature, and reflects the greater success that Hispanics and Asians enjoy in exchanging their socioeconomic gains for better residential environments; the relative inability of blacks to do the same is traditionally interpreted as reflecting the persistence of structural barriers to blacks’ housing choices (Rosenbaum and Friedman 2007). Yet that only the predicted white/black gap in ownership dramatically rose after 2005 suggests that there is something unique about blacks’ experiences within the housing market that heightened their vulnerability to the housing collapse and ensuing Great Depression. A likely candidate is racial residential segregation, which, during the last decade, may have delivered a one-two punch to black neighborhoods and their residents. The first punch was by creating an easily targeted market

niche for risky, subprime loans (Rugh and Massey 2010), thereby helping to disproportionately locate the consequences of the housing collapse in predominantly black neighborhoods. With black neighborhoods and their residents already in freefall, the housing collapse gave way to the Great Recession for the second punch, as racial segregation has long concentrated the consequences of broad, macroeconomic shocks in those same neighborhoods (Massey and Denton 1993). While consistent with much research, this speculation requires empirical testing to be recognized as an underlying cause for the uniquely devastating experiences blacks endured in the housing market during the last decade.

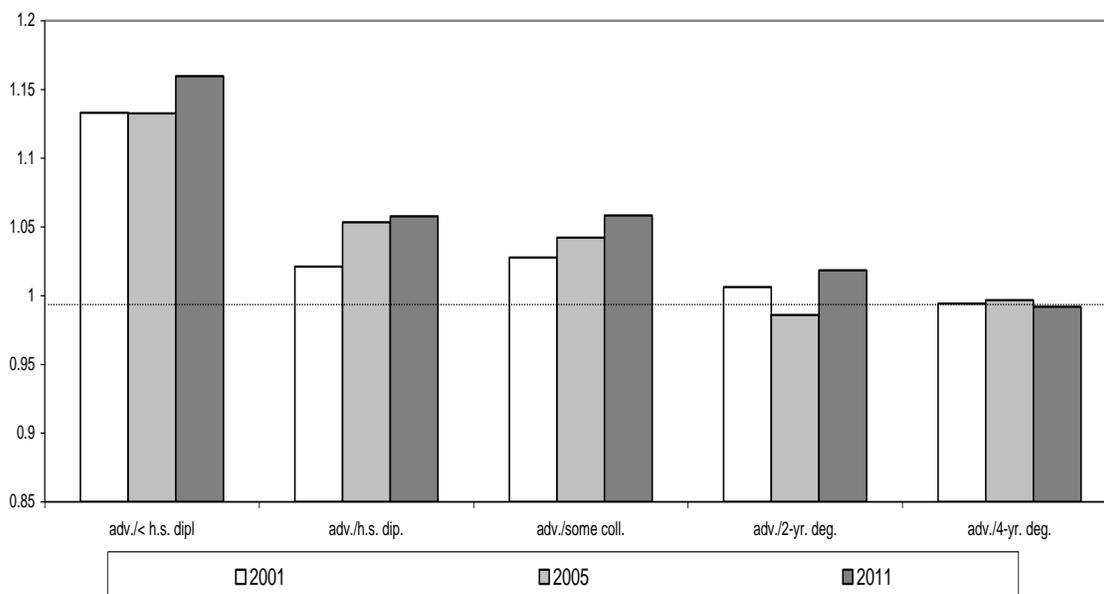
Figure 2: Ratios comparing predicted ownership rates for whites to the predicted rates for Blacks, Hispanics, and Asians, for 2001, 2005, and 2011



Note: All predicted rates are calculated keeping all variables apart from race/ethnicity constant at their means. See Appendix Table A1 for the full results of the year-specific logistic regression models upon which the predicted rates are based.

Controlling for the other correlates of home ownership greatly narrows the predicted gaps separating the most highly educated households from all other households, save the least-educated households (Figure 3). For all but the least-educated households, lower levels of home ownership relative to the most-educated households are largely due to differing characteristics (such as income, race/ethnicity, region) that work to the advantage of the most educated. However, recalling the growing importance of education as a predictor of home ownership, the ratios in Figure 3 also indicated that the predicted gaps separating the most highly educated households from those in the three lowest categories of educational attainment grow over the decade. While the unique disadvantage of the least-educated households deepens, it is important to note that the predicted gaps separating the most-educated households from those with a high school diploma or some college remain relatively small; in 2011, the most-educated households are predicted to have ownership rates only about 6 percent higher than those with a high school diploma or some college (but rates nearly 16 percent higher than those of the least-educated).

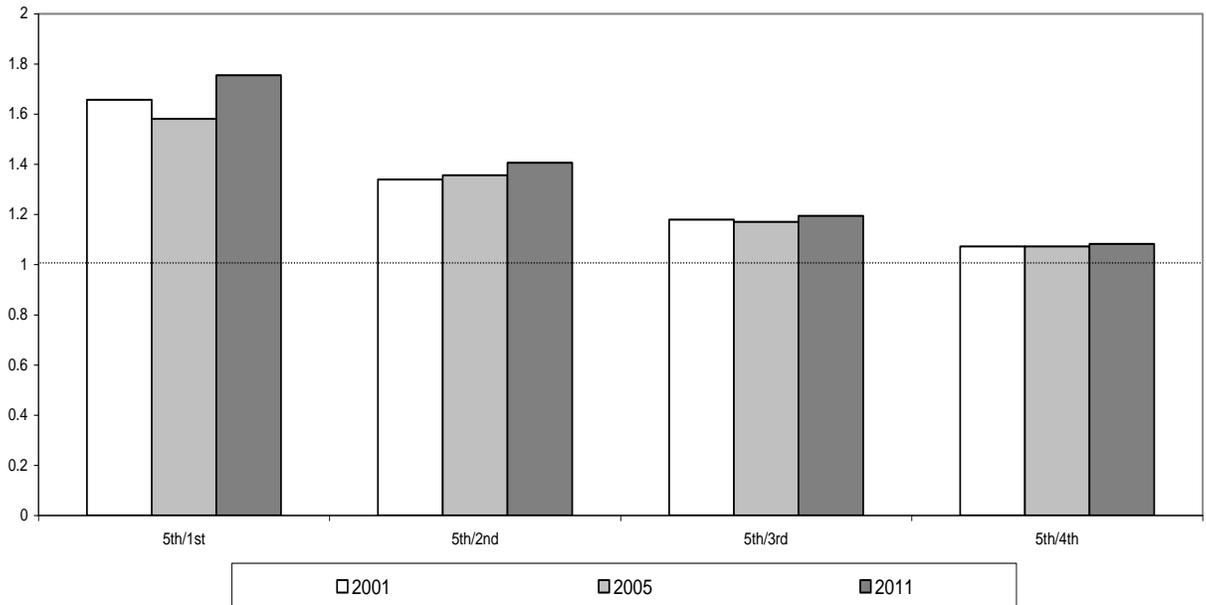
Figure 3: Ratios comparing predicted ownership rate for advanced degree to the predicted rates for all other levels of attainment, for 2001, 2005, and 2011



Note: Predicted rates are calculated keeping all variables apart from educational attainment constant at their means. See Appendix Table A1 for the full results of the year-specific logistic regression models upon which these predicted rates are based.

Finally, Figure 4 shows the ratios of predicted home ownership probabilities for households in the top income quintile relative to those at all other quintiles. In terms of size, the predicted gaps separating households in the top and bottom income quintile exceed those evident for education and race/ethnicity, underscoring the greater, independent strength of ownership inequality by income. Of perhaps greater importance, the predicted gap separating households at the extremes of the income distribution widens over time, indicating that the least affluent are not slipping further behind the most affluent in terms of home ownership because of different characteristics (such as urban residence, race/ethnicity, or low education), but because of limited financial resources. The limited financial security of households at the bottom of the income distribution was further destabilized by the Great Recession, which resulted in widespread joblessness at the bottom of the income distribution and thus heightened income inequality (Smeeding et al. 2011). With relatively insufficient funds growing scarcer, households at the bottom of the income distribution saw their piece of the American dream slip further away.

Figure 4: Ratios comparing predicted ownership rate for highest household income quintile to the predicted rates for all other quintiles, for 2001, 2005, and 2011



Note: Predicted rates are calculated keeping all other variables apart from household income quintile constant at their means. See Appendix Table A1 for the full results of the year-specific logistic regressions upon which the predicted rates are based.

Conclusion

Overall, the home ownership rate dropped about one percentage point between 2001 and 2011, but between these dates ownership took a wild ride. The climb and subsequent fall after mid-decade that we see in a simple trend, despite their impressive size, do not tell the full story. After controlling for household and regional factors that might influence the probability of ownership, the rise in ownership was far steeper than has been recognized up to now, and the freefall following the housing market collapse and ensuing recession was far scarier. All in all, the observed trend seems more like a kiddie ride than the roller coaster lying under its surface.

Of perhaps greater importance, some groups were far less able to weather the dramatic ups and downs of the housing market during the last decade. Blacks, the poorest households, and those headed by high school dropouts did not participate in the rise during 2001-2005 and they suffered the largest net losses in ownership during the decade. Because these are the traditional axes of stratification that have long divided U.S. society, losses by these groups have deepened and solidified patterns of residential and wealth inequality. This is especially true for race/ethnicity and household income. Multivariate analyses demonstrate that these factors both strengthened over the decade as predictors of ownership, but also *independently* ensured that home ownership increasingly became an option disproportionately available to the more socially and financially privileged segments of U.S. society. In addition, the finding that the fortunes of the least-affluent and black households deteriorated so rapidly and so far over the decade suggests that the prospects for ownership among those at the intersection of these groups – such as poor blacks – have gravely worsened.

The vastly different housing and economic environments of the 1990s and 2000s are reflected in the housing careers of individual cohorts. While all cohorts – apart from the very oldest – seem to have taken advantage of the robust housing markets of the 1990s, members of the Late Baby Boom accrued the most significant advantage. While this cohort launched in 1990 at a lower initial ownership rate than did its immediate successor (Generation X) in 2000 (Myers 2005), the Late Baby Boom was able to overcome this deficit by virtue of good timing, i.e., hitting the life-course stage with the steepest incline in ownership during a widespread boom in ownership. By contrast, Generation X experienced this critical life-course stage during the last decade. With its progress stalled by an adverse housing market and weakened economy, Generation X emerged from the decade at ages 35-44 with a lower level of ownership than its immediate predecessor. As Generation Y now passes through the same life-course stage and facing its own economic and housing challenges, it is unlikely to make up for its poor starting point (in 2010, and relative to Generation X's start in 2000). The difficult circumstances facing these recent and fairly large cohorts imply that future gains in the overall ownership rate will be difficult to achieve.

References

- Allen, Ryan. 2011. "Who Experiences Foreclosures? The Characteristics of Households Experiencing a Foreclosure in Minneapolis, Minnesota." *Housing Studies* 26: 845-66.
- Bostic, Raphael, and KwanOk Lee. 2007. "Home Ownership: America's Dream." Paper presented at a National Poverty Center Conference, "Access, Assets, and Poverty," October.
- Bostic, Raphael, and Brian Surette. 2000. "Have the Doors Opened Wider? Trends in Home Ownership Rates by Race and Income." NBER Working Paper.
- Cortes, Alvaro, Christopher Herbert, Erin Wilson, and Elizabeth Clay. 2007. "Factors Affecting Hispanic Home Ownership: A Review of the Literature." *Cityscape* 9: 53-92.
- Engel, Kathleen and Patricia McCoy. 2008. "From Credit Denial to Predatory Lending: The Challenge of Sustaining Minority Homeownership." Pp. 81-125 in James Carr and Nandinee Kutty (eds.). *Segregation: The Rising Costs for America*. New York, NY: Routledge.
- Farley, Reynolds. 1996. *The New American Reality: Who We Are, How We Got Here, and Where We Are Going*. New York, NY: Russell Sage Foundation Press.
- Flippen, Chenoa. 2010. "The Spatial Dynamics of Stratification: Metropolitan Context, Population Redistribution, and Black and Hispanic Homeownership." *Demography* 47: 845-68.
- Fry, Richard, D'Vera Cohn, Gretchen Livingston, and Paul Taylor. 2011. *The Old Prosper Relative to the Young: The Rising Age Gap in Economic Well-Being*. Washington, DC: Pew Research Center.
- Gabriel, Stuart and Stuart Rosenthal. 2005. "Home Ownership in the 1980s and 1990s: Aggregate Trends and Racial Gaps." *Journal of Urban Economics* 57: 101-27.
- Immergluck, Dan. 2009. *Foreclosed: High-risk Lending, Deregulation, and the Undermining of America's Mortgage Market*. Ithaca, NY: Cornell University Press.
- Immergluck, Dan. 2011. "The Local Wreckage of Global Capital: The Subprime Crisis, Federal Policy and High-Foreclosure Neighborhoods in the U.S." *International Journal of Urban and Regional Research*. 35: 130-146.
- King, Miriam, Steven Ruggles, J. Trent Alexander, Sarah Flood, Katie Genadek, Matthew B. Schroeder, Brandon Trampe, and Rebecca Vick. Integrated Public Use Microdata Series, Current Population Survey: Version 3.0. [Machine-readable database]. Minneapolis, MN: University of Minnesota, 2010.
- Kochhar, Rakesh, Ana Gonzalez-Barrera, and Daniel Dockterman. 2009. *Through Boom and Bust: Minorities, Immigrants and Homeownership*. Washington, DC: Pew Research Center.

Masnack, George. 2001. "Home Ownership Trends and Racial Inequality in the United States in the 20th Century." Joint Center for Housing Studies Working Paper W01-4.

Massey, Douglas and Nancy Denton. 1993. *American Apartheid: Segregation and the Making of the Underclass*. Cambridge, MA: Harvard University Press.

Mazur, Christopher and Ellen Wilson. 2011. "Housing Characteristics: 2010." *Census Briefs*. Washington, D.C.: U.S. Census Bureau. <http://www.census.gov/prod/cen2010/briefs/c2010br-07.pdf>.

Myers, Dowell. 2005. "Cohorts and Socioeconomic Progress." *The American People: Census 2000*. Reynolds Farley and John Haaga (eds). New York, NY: Russell Sage Foundation Press.

Myers, Dowell and Jennifer Wolch. 1995. "Polarization of Housing Status:," in *State of the Union: Volume 1, Economic Trends*, ed. Reynolds Farley. New York, NY: Russell Sage Foundation.

Reardon, Sean and Kendra Bischoff. 2011. *Growth in the Residential Segregation of Families by Income, 1970-2009*. US 2010 Research Brief.

Rosenbaum, Emily and Samantha Friedman. 2007. *The Housing Divide: How Generations of Immigrants Fare in New York's Housing Market*. New York, NY: NYU Press.

Rugh, Jacob and Douglas Massey. 2010. "Racial Segregation and the American Foreclosure Crisis." *American Sociological Review* 75: 629-51.

Saegert, Susan, Desiree Fields, and Kimberly Libman. 2009. "Deflating the Dream: Radical Risk and the Neoliberalization of Homeownership." *Journal of Urban Affairs* 31: 297-317.

Schwartz, Alex. 2009. *Housing Policy in the United States: An Introduction*. New York: Routledge.

Shlay, Anne. 2006. "Low-income Homeownership: American Dream or Delusion?" *Urban Studies* 43: 511-31.

Smeeding, Timothy, Jeffrey Thompson, Asaf Levanon, and Esra Burak. 2011. "Poverty and Income Inequality in the Early Stages of the Great Recession." Pp. 82-126 in David Grusky, Bruce Western and Christopher Wimer (eds.), *The Great Recession*. New York, NY: Russell Sage Foundation.

Taylor, Paul, Rakesh Kochhar, Richard Fry, Gabriel Velasco, and Seth Motel. 2011. *Twenty-to-One: Wealth Gaps Rise to Record Highs Between Whites, Blacks, and Hispanics*. Washington, DC: Pew Research Center.

Wolff, Edward, Lindsay Owens, and Esra Burak. 2011. "How Much Wealth Was Destroyed in the Great Recession?" Pp. 127-58 in David Grusky, Bruce Western and Christopher Wimer (eds.), *The Great Recession*. New York, NY: Russell Sage Foundation.

Appendix

Appendix Table A1: Results of logistic regression models predicting home ownership among U.S. households, all years combined and for 2001, 2005, and 2011 separately (continued)

Predictor	Pooled Model	Separate years		
		2001	2005	2011
Region (vs. South)				
Northeast	0.5649 ***	0.5651 ***	0.5703 ***	0.5809 ***
Midwest	0.9272 ***	1.0264	0.9469 *	0.8876 ***
West	0.6365 ***	0.6591 ***	0.6678 ***	0.5936 ***
Metro status (vs. in metro, suburb²)				
Not in metro	1.1950 ***	1.1866 ***	1.1414 ***	1.1867 ***
In metro, central city	0.5596 ***	0.5675 ***	0.5412 ***	0.5556 ***
Householder nativity/citizenship status (vs. born in U.S.)				
Foreign born, citizen	0.9197 ***	0.9036 *	0.8454 ***	0.9419
Foreign born, not citizen	0.3963 ***	0.3327 ***	0.3821 ***	0.4462 ***
Householder age (vs. 35-44)				
15-24	0.2822 ***	0.2575 ***	0.2776 ***	0.2885 ***
25-34	0.4779 ***	0.4735 ***	0.4815 ***	0.4548 ***
45-54	1.5956 ***	1.6061 ***	1.4553 ***	1.6338 ***
55-64	2.6354 ***	2.8950 ***	2.3601 ***	2.5924 ***
65-74	4.2792 ***	4.7352 ***	3.7404 ***	4.4323 ***
75 and older	4.5479 ***	4.4631 ***	3.9516 ***	4.9937 ***
Female householder	0.9926	1.0110	1.0224	1.0035
Householder marital status (vs. currently married)				
Previously married	0.3936 ***	0.3868 ***	0.3748 ***	0.4262 ***
Never married	0.3446 ***	0.3232 ***	0.3215 ***	0.3906 ***
Number of own children in household (vs. 2+)				
0	0.7305 ***	0.6696 ***	0.7493 ***	0.8193 ***
1	0.8464 ***	0.8165 ***	0.8650 ***	0.9127 **
Constant	14.7050 ***	12.6701 ***	15.1199 ***	10.6535 ***
Cox and Snell R²	0.2849	0.2896	0.2798	0.2898
Nagelkerke R²	0.3987	0.4052	0.3952	0.4020
N	445,935	70,874	75,739	77,137

* p<= .05; ** p<= .10; *** p<= .001.

¹ The household income deciles were computed for each survey year separately.

² This category includes households that live in metro areas but outside of the central city.

Appendix Table A1: Results of logistic regression models predicting home ownership among U.S. households, all years combined and for 2001, 2005, and 2011 separately (continued)

Predictor	Pooled Model	Separate years		
		2001	2005	2011
Region (vs. South)				
Northeast	0.5649 ***	0.5651 ***	0.5703 ***	0.5809 ***
Midwest	0.9272 ***	1.0264	0.9469 *	0.8876 ***
West	0.6365 ***	0.6591 ***	0.6678 ***	0.5936 ***
Metro status (vs. in metro, suburb²)				
Not in metro	1.1950 ***	1.1866 ***	1.1414 ***	1.1867 ***
In metro, central city	0.5596 ***	0.5675 ***	0.5412 ***	0.5556 ***
Householder nativity/citizenship status (vs. born in U.S.)				
Foreign born, citizen	0.9197 ***	0.9036 *	0.8454 ***	0.9419
Foreign born, not citizen	0.3963 ***	0.3327 ***	0.3821 ***	0.4462 ***
Householder age (vs. 35-44)				
15-24	0.2822 ***	0.2575 ***	0.2776 ***	0.2885 ***
25-34	0.4779 ***	0.4735 ***	0.4815 ***	0.4548 ***
45-54	1.5956 ***	1.6061 ***	1.4553 ***	1.6338 ***
55-64	2.6354 ***	2.8950 ***	2.3601 ***	2.5924 ***
65-74	4.2792 ***	4.7352 ***	3.7404 ***	4.4323 ***
75 and older	4.5479 ***	4.4631 ***	3.9516 ***	4.9937 ***
Female householder	0.9926	1.0110	1.0224	1.0035
Householder marital status (vs. currently married)				
Previously married	0.3936 ***	0.3868 ***	0.3748 ***	0.4262 ***
Never married	0.3446 ***	0.3232 ***	0.3215 ***	0.3906 ***
Number of own children in household (vs. 2+)				
0	0.7305 ***	0.6696 ***	0.7493 ***	0.8193 ***
1	0.8464 ***	0.8165 ***	0.8650 ***	0.9127 **
Constant	14.7050 ***	12.6701 ***	15.1199 ***	10.6535 ***
Cox and Snell R²	0.2849	0.2896	0.2798	0.2898
Nagelkerke R²	0.3987	0.4052	0.3952	0.4020
N	445,935	70,874	75,739	77,137

* p<=.05; ** p<=.10; *** p<=.001.

¹ The household income deciles were computed for each survey year separately.

² This category includes households that live in metro areas but outside of the central city.