

Joint Center for Housing Studies

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**The Dream Lives On:
The Future of Homeownership in America**

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With house prices falling nationally by more than 30 percent from 2006 to 2011 and foreclosures soaring, many have started to write the obituary on homeownership in America. They argue that people, especially young adults, have watched the carnage and decided homeownership is not for them.

Consider these quotes:

We believe this change is only the beginning, and is moving this country towards becoming a Rentership Society – Morgan Stanley, July 20, 2001

This week, I did my best to unpack the end of [home] ownership as a national ambition – Derek Thompson, *The Atlantic*, 2012

Young adults' attitudes toward buying may also have shifted. When prices were rising, many felt certain they could sell at a profit anytime. Now, the real estate bubble has burst, and a quick and profitable sale is by no means guaranteed. Add to that the fact that young people, as a whole, are less likely to have married, started a family, or settled into a long-term job. – Sarah Shemkus, Salary.com

Yet there are clear signals already that the dream of homeownership remains very much alive. Attitudinal surveys recently conducted by a range of different organizations show strong and continued interest in homeownership, even among young adults.

History suggests that market conditions have a powerful influence on homeownership rates by age, race, and household type. That a major collapse in home prices, high unemployment, record foreclosures, and a tightening of mortgage credit would produce a slide in homeownership rates should not be surprising. Economic theory supports this view—the choice to own or rent at any point in time should be influenced by people's expectations about the future of home prices, rents, and returns on potential other investments. In addition, changes in underwriting standards matter because credit constraints can thwart people's ability to act on their interest in owning (Linneman and Wachter, 1989; Rosenthal, 2002; Gabriel and Rosenthal, 2011).

The question is whether recent house price declines and the contraction of mortgage credit will produce a profound and lasting change in Americans' desire or ability to own homes.

So far, as evidence presented below will make plain, events of the last several years have not done much to deter people's desires to own. Indeed, while by one measure the share of people viewing homeownership as a safe investment took a hit, by another measure, the share stating it is a good time to buy took only a modest dip after the Great Recession. Furthermore, while the number of available surveys that allow for a time-series comparison is small, several recent surveys on attitudes towards homeownership show strikingly little association between local variations in severity of home price declines and the share of people expressing the view that owning makes more sense financially than renting (Collins and Choi, 2010; Bracha and Jamison, 2011; Drew and Herbert, 2012). In addition, the share of people who feel that owning makes more sense financially is high, and barely less so for younger adults than those in middle age. Even more telling, 19 out of 20 people under the age of 45 expect to buy a home at some point in the future.

But as evidence presented below will also make plain, the *ability* to buy homes has been badly impaired by the imposition of tight underwriting standards. In fact, if not for the availability of low-down FHA loans—albeit at higher premium costs than in the past and with some reduction in access based on the credit scores of the borrower—the falloff in homeownership would almost certainly have been greater, as would have been the slide in home prices due to lack of effective demand.²

Thus, economic, credit, and housing market conditions unambiguously have a significant impact on decisions to become a homeowner or rent instead just as theory suggests. As these conditions change—for example if prices begin to appreciate, even if slowly, and tenants start receiving rent increase notices—many more will likely try to act on their desire to become homeowners than when prices were diving and rents soft.

For at least the next several years, access to mortgage credit may be a significant constraint on people’s ability to act on their desires to own, as it was in the 1980s and much of the 1990s. It appears that underwriting standards are now tighter than in the 1990s, before lending excesses and products with high payment reset risks (like interest-only and option payment mortgages) mushroomed in the first half or so of the 2000s. But future credit conditions are also hard to predict, and at least some easing is already in evidence (FHA Brief, 2012). Furthermore, as home prices appreciate, more investors in mortgages could relax their standards under the expectation of rising prices. That said, for quite some time it will be the underwriting policies of FHA and Fannie Mae and Freddie Mac that will govern access.³

Access to homeownership remains critical for building wealth. While there now is little question that buying a home can result in financial losses, homeownership over long periods has allowed many households to accumulate a level of wealth they would not have otherwise (Di, Belsky, and Lui, 2007). With wealth even more unevenly distributed than income—and with income, wealth, and credit scores on average lower for minorities than whites—access to mortgage credit for homeownership for low-income and low-wealth borrowers will likely have major implications for the severity of wealth disparities moving forward.

This paper first examines attitudes towards homeownership after the housing boom went bust and, where possible, compares it to attitudes before the bust. It then explores changes in homeownership rates starting in 1994 by age, race, and family type, revealing the importance of market conditions in driving changes in these rates. The importance of credit availability and constraints on people’s capacity to own will then be explored. Next, the paper will cover the choice to own or rent as viewed by economists, and why economic tools intended to help inform tenure choices are at once worthwhile but ultimately unsatisfying. Finally, the paper ends with why homeownership, because of its unique properties relative to other possible investments (especially for low-income families and individuals),

² This is especially true for low-income and minority homebuyers, who relied heavily on FHA as a source of credit for home purchases (Joint Center for Housing Studies, 2012, p. 21).

³ Though the US Department of Treasury has signaled its intention to wind down Fannie and Freddie, this will likely take some time to accomplish. In the interim, the two entities have been tightening rather than relaxing credit standards.

will likely remain an important vehicle for building assets as well as a favored option for nonfinancial reasons as well.

Attitudes towards Homeownership

The desire to own a home has changed little and remains strong. Unfortunately, there are few surveys of attitudes towards home buying or homeownership that started prior to the Great Recession and continued after it. One—and by far the longest one around—comes from the University of Michigan’s Survey of Consumers, which asks if respondents think now is a good time to buy a home. Looking at quarterly responses dating back to 1968, it is clear that those judging it a good time to buy were affected surprisingly little by the Great Recession (Figure 1). Indeed, the drop in the share with this view was modest relative to the drop around the last previous severe double-dip recession of 1980-1982. In addition, the chart shows that the view on whether it is a good time to buy is influenced by housing and economic conditions, falling during periods of distress and rising during recoveries.

A more direct measure of attitudes towards homeownership from a financial perspective is the response to a question in Fannie Mae’s National Housing Survey regarding whether housing is viewed as a safe investment. The question was asked in 2003 and then again quarterly starting in 2010. Among those with a mortgage, the share reporting that housing is a safe investment, unsurprisingly, slipped between 2003, when the market was strong, and 2012, after the market had suffered a precipitous drop in home prices and a constant drumbeat of frightening news of elevated foreclosures. Perhaps more unexpectedly, though, the share viewing housing as a safe investment among this group fell only from 82 to 72 percent between 2010 and 2012. One might have expected a larger drop given that about 4 million homeowners lost their homes to foreclosure from 2008 through 2011 and about 1 in 4 homeowners were carrying mortgage debt greater than the value of their homes.⁴ The drop in the percent of renters viewing housing as a safe investment was more dramatic—from 78 to 51 percent over the same time period.

Other surveys that ask similar questions vary in what they find about views of housing as a safe investment. For example, the Pew Charitable Trusts asked people: “Some people say that buying a home is the best long-term investment in the United States. Do you strongly agree, somewhat agree, somewhat disagree, or strongly disagree with this statement?” Fully 81 percent of those surveyed agreed. Meredith asked just owners if they agreed that “Despite the downturn in the US housing market, I still believe that buying a home was a good investment;” a strong 86 percent agreed (though of course those who failed in ownership were no longer homeowners at the time of the survey). On the other hand, when asked “These days, do you think buying a home is generally a safe investment or generally a risky investment?,” by a New York Times-CBS survey, only 49 percent responded that it was generally a safe investment. The phrasing of the question, particularly its present rather than long-run view, may have made the difference in the response rate.

⁴ Estimates of the number of completed foreclosures are derived from the Mortgage Bankers Association National Delinquency Survey and of borrowers with homes worth less than they owe on their mortgages from CoreLogic.

While there is no long time-series survey with more direct questions regarding whether people think that, overall, owning makes more financial sense than renting, or if they plan to buy at some point in the future, recent questions that get at these important and more direct measures of interest in homeownership find them at remarkably high levels, especially in light of the fact that home prices have fallen so much. The Fannie Mae National Housing Survey asks: “Which is closer to your view? Renting makes more sense because it protects you against house price declines and is actually a better deal than owning. Owning makes more sense because you’re protected against rents increasing and owning is a good investment over the long term.” In the first quarter of 2011, 87 percent of all respondents, 92 percent of mortgage holders, and 74 percent of renters thought owning made more sense when asked in these terms. These are unquestionably high levels and show that financial attitudes about homeownership are very favorable even now. Furthermore, the share with the view that owning a home makes more sense than renting is nearly as high among younger adults who allegedly are more disinclined to view owning favorably because they expect to change jobs and locations so much and they do not think housing is a safe investment (Figure 2).

Again, other surveys found somewhat different results. A survey by Hanley-Wood that asked if “owning makes better financial sense than renting” found that 86 percent of homeowners agreed but only 54 percent of renters. Another by New York Times-CBS that asked “in general these days, do you think renting a home or owning a home makes more sense financially?” found 64 percent overall agreed, compared with the 87 percent responding to the related, but more leadingly-phrased question in the Fannie Mae survey. Again, the difference likely relates to the distinction between how people feel about the financial sense of ownership “these days” versus over the longer run, as well as the lack of cues in the Hanley-Wood survey compared to Fannie Mae’s.

When renters are asked if they intend to own someday (perhaps the best single measure of whether renters have been permanently put off of homeownership or may just question its safety as an investment now), again predominant majorities respond positively. Responding to the New York Times-CBS survey, 85 percent said they would like to own their home at some point when asked “regardless of whether you think you can afford it, would you like to own a home someday, or would you prefer to continue renting?” A similar question in a survey by NAHB (“Is one of your goals to eventually own a home?”) found 73 percent of renters responding that owning was an eventual goal. And the Pew Charitable Trust survey found that 81 percent of renters would like to “buy a house at some point.” Perhaps most telling of all is the remarkably high share of young and early middle-aged adults surveyed by Fannie Mae who expect to buy a home at some point in the future. Drew and Herbert (2012), pooling the National Housing Survey data from 2010-2012, created a variable to capture both owners and renters who anticipated buying a home in the future and found that fully 94 to 95 percent of people between the ages of 18 and 44 expected to do so (Figure 3). It is hard to argue that the younger generations have been turned off of homeownership with numbers like that.

As for whether local variations in housing market distress influence attitudes towards homeownership, three studies which control for a range of other factors that might also influence attitudes (like age, income, family type, and several others) found, surprisingly, that variations in location conditions mostly did not drive variation in attitudes towards homeownership. Collins and Choi (2010) analyzed responses

of 400 renters with incomes under \$75,000 in the San Francisco Bay Area and found that differences in house price changes and foreclosure rates in their zip codes did not have a statistically significant correlation with intentions to buy a home in the near future or with how they viewed the risks and benefits of homeownership. Bracha and Jamison (2011), regressing a range of variables on about 1,000 respondents to the Michigan Survey of Consumers in 2011, found no association between the magnitude of house price declines at the zip code level and the belief that owning a home makes more financial sense than renting, except for a weak relationship when respondents were divided by those under 58 years of age and those 58 and older.⁵ Drew and Herbert (2012) used a much larger pooled dataset from Fannie Mae's National Housing Survey (19,030 respondents) to test whether house price declines and delinquency rates at the zip code level had an influence on the share that think owning makes more sense than renting (in a longer run sense) or on their expectations of buying a home at some point in the future. They found that zip-code level home price declines did not have a significant influence on attitudes, all else equal, but that delinquency rates did have an impact, though only on the view of whether owning or renting made more sense, not on expectations of buying a home at some point in the future. And while the odds of expecting to buy again were 14 percent lower among owners who reported knowing a strategic defaulter (whose defaults stemmed mostly from being underwater on their mortgages), there was still no difference in likelihood that they thought owning made more sense than renting.

Thus, while an overall awareness of the bursting of the housing bubble has dampened people's enthusiasm for homeownership to some degree, their financial attitudes towards homeownership are still largely—and in some surveys overwhelmingly—favorable. Nearly all adults under age 45 still intend to buy a home at some point in the future. And the severity of local house price declines did not have any independent influence on homeownership attitudes, though the rate of delinquencies nearby may have had some impact on views of the financial appeal of ownership.

It is important to note, however, that it is unclear how Americans put their preferences for homeownership to use in terms of the timing of their decisions. The next sections will take up these issues, exploring market conditions and economic models of decision-making.

Market Conditions and Homeownership Choices

Having a stated preference for owning a home is quite different from actually acting on it. People may delay home purchases for a host of reasons, including anticipated changes in jobs, family status, and expectations about near- and medium-term changes in home prices and rents. In addition, there is little doubt that credit constraints may thwart people's ability to act on their preferences because the vast majority of people have to borrow money to buy a home. While this paper will not empirically evaluate which economic and credit factors have played a role in Americans' ability to own by age and family characteristic over time, it does underscore that homeownership rates do change as a result of market factors, and that extrapolating from one period to another is a perilous exercise.

⁵ This age break was not based on any *a priori* view of how age might influence this finding but rather a search to see if there was any dividing line by age. Many others close to this break failed to produce a statistical significant result.

Consider the homeownership rate changes since 1994, controlling for age and household type—both of which are known to vary systematically with homeownership at any one point in time and over time. During the period 1994-2000, with income growth strong and the introduction of automated underwriting methods (which allowed many more people to qualify for a mortgage without breaching risk thresholds of lenders), homeownership rates (after controlling for demographic characteristics) soared (see Appendix). Other factors that likely contributed to this growth included efforts to comply with a reinvigorated Community Reinvestment Act, cases brought and settled against mortgage discrimination that led to active industry efforts aimed at fair lending, some home price appreciation, and affordable and underserved lending goals imposed on Fannie Mae and Freddie Mac (Litan et al. 2000).

Then from 2000-2004, homeownership rates continued to climb, likely as a result of falling mortgage rates, initially tight housing market conditions, easy credit, and backward-looking expectations concerning home prices that led people to expect prices to keep climbing. A house price bubble developed and home sales set records despite 9/11 and a 2001 recession that would normally have caused sales and prices to fall or slow.

But after cresting, homeownership rates fell dramatically from 2004-2010 in response to record foreclosures, deflation in home prices that sidelined borrowers, high unemployment, and a ratcheting down of credit access through tighter underwriting and withdrawal of affordability products like interest-only loans and 2/28 adjustable rate mortgages with steep initial discounts.

If the aging of the population, for example, were the only factor at play, the overall national homeownership rate would have increased by only 0.8 percentage points from 1994-2004. Instead it soared by 4.3 percentage points. Clearly age-specific changes, driven by macroeconomic changes, trumped aging effects. Similarly, if the aging of the population were all that was at play from 2004-2010, the homeownership rate would have *increased* by 0.7 percentage points. Instead, it actually *decreased* by 1.4 percentage points (Figure 4). This underscores that home buying and homeownership rates are highly sensitive to market conditions and can easily swarm predictable and systematic differences by demographic characteristics. Findings from a more detailed study by Gabriel and Rosenthal (2011) affirm this conclusion.

Mortgage Constraints

That people aspire to homeownership—even after a deep slide in home prices and foreclosure rates higher only during the Great Depression—is clear. While they may postpone acting on that desire, as they almost certainly have over the past few years, a return to price appreciation and strong employment growth could readily change that.

But they may be prevented from acting on their desire to buy by underwriting standards or decide not to even apply out of fear of being denied a loan (Figure 5). Even with housing affordability at record highs (Figure 6), people may still struggle to afford homes. Indeed, Savage (2009), after a long hiatus, produced his sporadically recurring report called *Who Can Afford to Buy a Home*, this time for 2004, reminding us all that wealth and income constraints to homeownership were back.

And these constraints, along with credit score constraints, appear to have returned with a vengeance. Consider the swing in what here are described as low-risk loans (loan-to-value ratios of 75 percent or less and credit scores of 750 higher) originated by Fannie Mae and Freddie Mac in 2010 versus 2006 (Figure 7). Consider also the shift in credit scores in FHA's portfolio (Figure 8). Furthermore, senior bank loan officers have reported a severe and prolonged period of tightening unlike anything seen after the 1991 or 2001 recessions (Figure 9). Unambiguously, credit standards have tightened dramatically.

With the will to buy homes still there, and the slow return of conditions that motivate people to act on it, homeownership rates therefore will still struggle to rebound as long as credit remains tight. How long this will persist is uncertain, but with FHA originating half of all home purchase loans in 2010 (according to Home Mortgage Disclosure Act data), and Fannie Mae and Freddie Mac (now under government conservatorship and control) supplying most of the rest, for some period of time the federal government will determine credit availability.

FHA has played an especially important role because it has been the supplier of low down payment loans on which so many in the market depend. For example, FHA estimates that in the first quarter of 2012 it supplied 85 percent of loans with down payments of 5 percent or less. Especially for those with low incomes and for minorities, both of whom have lower average wealth than others, what happens with FHA is of great importance. To drive home the point, the Center for Responsible Lending (2011) estimated that in 2009 it would take the average household, at the personal savings rate in 2009, six years to accumulate a 5 percent down payment. For lower-income Americans it would take much longer. Under pressure to improve its capital reserves (which have fallen below a statutorily required level), FHA has so far made many changes, but tightening of down payment standards has thus far been modest.

In terms of making predictions about future ownership rates, the impact of underwriting can have large impacts. Using an ordinary-least squares regression equation, Gabriel and Rosenthal (2011) recently examined the correlation of homeownership for each of 60 age groups from 20 to 80 year olds in each of the years 2000, 2005, and 2009 with a range of pertinent variables, including family income, type of employment (employed, self-employed, professional, or managerial), hours worked, location (metro status as well as census division), disability status, median home price in their metro, and home price volatility (using quarterly data from 1985-2007). They fit another to recent movers, controlling for race, family type, level of education, as well as the variables used for the full sample. Gabriel and Rosenthal found the expected correlations with the probability of ownership on household characteristics given the assumptions that credit constrains homeownership and lifecycle factors like age and family type have an influence on these choices (Clark and Dieleman 1996). They also found that high home prices in an area were a deterrent to homeownership, but much less so in 2005 than 2000 and more so in 2009, consistent with the likely impact of changing underwriting standards and loan product availability and the ability to chase prices higher. The influence of employment status similarly decreased from 2000 to 2005, and then increased again in 2009, which the authors attribute to the temporary proliferation of low and no documentation loans around 2005. Lastly, the impact of house price volatility, which one would expect to deter homeownership, did so more strongly in 2000 and 2009 than in 2005, at which time the coefficient was actually positive for many age groups (especially among recent movers). Had

the coefficients in the 2005 model applied to the 2000 values, the homeownership rate in 2000 would have been a whopping 6.2 percentage points higher (though the role of house price expectations, which are critical to decisions to apply for a loan to buy, is not controlled for and could have had an impact).

Gabriel and Rosenthal's results speak volumes regarding the likely influence of mortgage constraints on homeownership rates. While these impacts are not measured directly, it is striking how much smaller the size of the effect of variables that one would expect to keep people from getting credit were in 2005 than 2000. Attempting to look at credit constraints more directly by including measures like past credit record blemishes at the household level, Rosenthal (2002) found that, all else equal, if all borrowing constraints in 1998 had been lifted, the national homeownership rate would have been 4 percentage points higher.

All this further underscores that price expectations and credit constraints have strong influences on the evolution of age-specific homeownership rates. This amplifies the challenge of making predictions about the future given that these variables are apt to assume different values than today.

The Economic View of the Choice to Own or Rent

Economics is a powerful lens for understanding how rational people should look at the choice of owning and renting and how credit constraints can stymie those who view homeownership as the preferred choice from an investment and financial perspective. It is also a powerful tool for making predictions about how this view, if it is at work, should manifest itself in terms of cross-sectional and temporal differences in homeownership rates of people by age, income, family type, wealth, and credit history. However, economics has its clear limits both as a predictive tool and as a guide to the best financial choice for a household at any particular point in time.

Furthermore, correlations between things like age, race, income, and credit constraints and observed homeownership rates can give a false impression of how much we really know about how people make tenure choices. Indeed, behavioral economics, which allows for irrational behavior based on biases and studies what actually motivates economic decisions, strongly suggests that when it comes to buying a home, people are prone to certain predictable biases. Yet because behavioral economists have yet to train their sights on the home buying decision (as opposed to the mortgage finance decisions, about which they have written a great deal), we really don't know what rules of thumb and shortcuts people take to make this very complicated decision, where financial results are probabilistic and not certain (see Belsky and Essene 2011 for a review of the application of behavioral economics to mortgage choice). Yet there is evidence that such rules of thumb and predictable biases in decision making can lead to poor choices, and these are more likely to surface precisely in tenure choices and other decisions involving risk and uncertainty, when multidimensional goods are involved that are difficult to compare, and when "some of the dimensions are not readily priced" (Laibson and Zeckhauser, 1998).

Let's start with the long-held view among economists that the choice to own or rent is fundamentally shaped by people's propensity to make rational calculations about the true relative costs of owning and renting after controlling for returns to alternative investments of the funds used towards a down payment. This view holds that that the choice to own or rent is, in the first instance, related to a

household's demand for investments, its appetite for various degrees of diversification in its portfolio, its expectations about returns on alternative investments, and whether its demand for a dollar amount invested in housing exceeds the dollar amount it wants to consume (Rosen, 1979; Hendershott, 1980; Ioannides and Rosenthal, 1994).

Leaving aside the question of optimal portfolio diversification of risk to simplify matters (see for example Goetzmann, 1993; Ambrose and Goetzmann, 1998; and Goetzmann and Spiegel, 2002), the choice to own or rent can be reduced to an elegant user-cost equation that captures all the variables that influence the costs of owning that must be toted up before concluding whether owning or renting is better financially.⁶ It includes house price appreciation (or depreciation), the opportunity cost of making a down payment (the return on an alternative investment of the same amount over the same holding period), the cost of capital adjusted for the value deductions of mortgage interest, the amount paid in property taxes adjusted for the value of property tax deductions, the amount spent to offset the depreciation of the property through maintenance and repair and replacement of worn out systems, other operating costs, the costs of any insurances on the home or mortgage net of any deduction, transaction costs to buy and sell the home, and the outstanding mortgage balance at the end of the holding period. More sophisticated versions may take into account mortgage refinancing and its impact on the ultimate costs of owning as well.

Assuming that housing bundles (in terms of the house and neighborhood characteristics) are the same, the cost of renting (the present value of rent payments over a holding period of identical length) simply needs to be subtracted from the user cost of owning to decide which is better. If it is a positive number, owning makes more sense, and if it is a negative number, renting does.

People can now easily use the Internet to locate online tools to compare the costs of owning and renting. These require users to make assumptions about the many variables they plug in, including return on an alternative use of a down payment and the direction of home prices.

While elegant and seemingly complete, the user-cost equation has an important—crucially important—drawback when it comes to using the framework to actually make a decision about whether to own or

⁶ More precisely, the user cost of capital (U_C) for homeownership over n years is:

$$\sum_{i=0}^n U_C = \sum_{i=0}^n \{ (1-t)[m_i + P_i(pr)_i] + P_i(d_i + op_i) + P_0(1-\alpha)(a)_i + pm_i \} + P_i(tr_0 + tr_n) + B_r(tr_r) - [g + t(nhd)] \quad i=0$$

Where P_i = house value in year 'i'; $G = (P_n - P_0)$ = house value in sale year minus house value in purchase year; T = owner's marginal tax rate; M = mortgage interest paid annually; Pr = annual local property tax rate; D = annual depreciation rate; Op = operating cost (maintenance + insurance); Pmi = annual cost of mortgage insurance; B = outstanding balance of mortgage; Tr_0 = transactions costs as share of house value in year of purchase; tr_n = transactions costs as share of house value in year of sale; tr_r = transactions costs as share of house value in year of refinance; A = rate of return on alternative investment; α = the fraction of house value financed; and Nhd = non-housing deductions taken by owners.

rent: the best choice can only really be seen through a rearview mirror. At the time a rational person tries to make a rational choice they cannot know exactly how their home price will change relative to rents on a comparable unit, what their tax rate will be at all points during which they own, or how long they will actually hold on to the home, and that's just for starters. Other variables are uncertain as well. They can only make assumptions about the future, using the past as a guide to make and assign weights to assumptions about risk. But the past may not be a perfect guide, and idiosyncratic events like job loss, marriage, divorce, or a birth or death in the family can alter the best laid holding period plans.

I may be a cynic, but it seems doubtful that people actually use a user-cost equation and assign probabilities to its variables—as well as weigh their appetites for risk and consider the beta on local housing in the context of optimal diversification of their investment portfolio—in order to decide if it is the right moment to buy or rent. Even if they did, they could find their assumptions about the state of the future were incorrect.

More likely, people use shorthand rules of thumbs to make assumptions about the future, yet volumes have now been written about how common fallacies and rules of thumb can lead to systematic biases about future probabilities (see Kahneman, 2011). These include the tendencies towards over-confidence and over-optimism, to overweight the present and discount future costs and benefits (giving greater weight to immediate payoffs than their long-term consequences and risks), to framing that poses propositions as losses rather than gains, to guessing at average probabilities well but failing to associate their own odds with these average probabilities, and, with respect to house prices, to form expectations by looking backward especially at the recent past (Mayer and Sinai, 2007). The tendency towards optimism and to discount less the effect of future events may cause people to form overly-confident views of how much home prices will appreciate and for how long, especially since the *ex post* comparison of owners and renters can easily lead to a conclusion that ownership over longer stretches has fewer risks than it actually does.

Consider how the notion that shorter expected holding periods favor renting because of transaction costs. In fact, buying when prices are rapidly escalating and selling only a couple of years later can produce better returns than buying at the same time but holding longer and selling after prices peak and fall below when the quicker seller sold. Indeed, at least in Boston and Philadelphia (two of four metros examined in one study), buyers (apart from those who sold a year later) who purchased at or near the trough of home price cycles in the early 1980s and sold within 9 years did substantially better than those who sold within years 10 to 15 in Boston and within 10-17 in Philadelphia (Belsky and Duda, 2002)—even those who sold in year two.

Despite its problems, “the rule of thumb” theory of ownership choices—to which I subscribe more than to the rational user-cost equation model—accords well with empirical observation and modeling of homeownership rates. The young and the unmarried are much less likely to own, even after controlling for differences in income and credit constraints (Rosenthal, 2002), probably because they think it makes more sense to rent to avoid the high transaction costs of buying and selling as well because they fret they may not be in their home long enough for appreciation to overcome these costs.

Yet it also appears that these biases in decision making may lead to systematic shifts in the timing of purchases that may operate at cross purposes to financial success. As early as 1974, Tversky and Kahneman noted that people tend to form judgments of probabilities entirely on observed similarities in familiar patterns. Particularly as prices increase (and the faster they do), people either develop an expectation that prices will just keep going higher⁷ and/or fear that if they do not buy they will be locked out from doing so later. Still others—call them investors or speculators—bet on price appreciation to make them a quick capital gain and begin to swell demand, causing prices to rise higher as supplies are tight.

While the theory of house price bubbles is by no means fully developed or tested, most treatments of bubbles feature the importance of backward-looking price expectations on markets overshooting as owners expect strong price appreciation of the recent past to keep occurring (Case and Shiller, 2003; Mayer and Sinai, 2007; Shiller, 2007; Case and Shiller, 2010). Back in 2003, Case and Shiller found that nearly nine in ten respondents in four metro areas surveyed expected house prices to increase by 12 to 16 percent a year—strongly suggestive of an unrealistic expectation of future growth set up by then-surgeing prices (Glaeser, Gyourko and Saiz, 2008). Mayer and Sinai found that a user-cost equation that deployed either a five-year lagged (backward-looking) price expectation outperformed both a long-run average price appreciation expectation and a lagged one-year price expectation assumption in explaining house price-to-rent ratio changes. Shiller found that people in places with rising prices tended to have higher expectations for home prices than people in places with slowing price growth, even though the former had seen prices rise much faster than incomes for some period of time. When surveying price expectations in 2010, Case and Shiller found that people in areas where the bubble had burst now expected home price declines.

In the recent bubble, it is likely that low interest rates played an important role because there is strong evidence that when people use debt to acquire an item they focus more on monthly debt payments than asset prices (Shu, 2003). It is only later that people realize that in the process they may have bid up assets and are now stuck with overvalued homes. In addition, Brunnermeier and Julliard (2008) argue that because households think in terms of nominal rather than real interest rates, falling nominal interest rates can elicit an irrational response: borrowers fail to appreciate that lower nominal rates signal a likely slowdown in rent and price appreciation rates. Other factors that can have a systematic influence on the timing of purchase decisions include fluctuations in affordability due to falling interest rates or average income growth, stronger or weaker than average house price growth, changes in access to mortgage credit, and low unemployment. All this must be taken into account in judging where homeownership rates may head in the future.

⁷ Shiller (2000) posited “feedback loops” of an appreciating asset price feed stronger demand for it, in turn leading to higher prices. This reinforces the view that the price of the asset will continue to climb, leading to “irrational exuberance” in markets. Shiller also found that stock investors in the US and Japan in the 1990s tended to extrapolate from recent stock market trends to make predictions about future ones.

Why Demand for Homeownership Will Likely Persist

There are many reasons why one can expect strong demand for homeownership to persist. Most importantly, Americans are clearly enamored with homeownership. They aspire towards it, with an overwhelming majority thinking that owning makes more financial sense than renting, and they esteem the control it gives them over their life because they can modify their homes as they see fit (subject to zoning and building codes and association rules) and because they cannot be asked to leave when a lease expires (though their lender may show them the door if they default on their loans). Beyond these reasons, homeowners identify homeownership rightly or wrongly with communities and living arrangements that are better places to raise children, safer places to live, and have more space—the three reasons in Fannie Mae’s National Housing Survey to buy a home with the most positive responses (Figure 10).

Apart from how enamored Americans are with homeownership, there are important financial reasons that most homeowners believe that ownership, at least at some point in their lives if not a large part of it, makes more sense than renting. The decision to own or rent has profound financial implications. Although, as we have seen, it is tough to judge when it is the right time to buy and sell in order to best ride house price cycles common at the local level, for long stretches of time and in many places owning a home has proven the right choice. In part this is because, apart from temporary imbalances in markets that can lead to periods of undersupply or oversupply, house prices and rents tend to go up at about the rate of general inflation, and house prices, at least, have tended to rise most closely with average incomes (Figure 11). The national view depicted in Figure 11, however, masks variation at the local level. Still, even controlling for location by examining the relationship between growth in house prices and per capita incomes, per capita income growth alone explains nearly all the growth in house prices in many states and a large proportion of the growth in the rest (Figure 12). This is conveyed by the R^2 , or percentage of the variation in changes in the home price index and changes in per capita incomes at the state level. So long as per capita incomes grow, home prices are likely to as well, and at a similar pace.

Several factors make the choice to own or rent financially consequential and make ownership relatively attractive.

First, housing is typically the one leveraged investment available to households. Few households are interested in borrowing money to buy stocks and bonds and few lenders are willing to lend them the money. As a result, homeownership allows households to amplify any appreciation on the value of their homes by a leverage factor. Even a hefty 20 percent down payment results in a leverage factor of five so that every percentage point rise in the value of the home is a 5 percent return on their equity. With many buyers putting 10 percent or less down, their leverage factor is 10 or more.

Second, households must consume housing whether they own or rent. Not even accounting for more favorable tax treatment of owning, homeowners pay debt service to pay down their own principal while households that rent pay down the principal of a landlord (assuming the landlord borrowed to acquire the property) plus a rate of return (and landlords that use only equity to acquire a rental property

should expect a higher rate of return because they have more of their own capital at risk). That's yet another reason owning often does—as Americans intuit—end up making more financial sense than renting.

Third, housing is usually a form of “forced savings” because the vast majority of people take out amortizing loans when they buy or refinance their homes. While many take advantage of borrowing against their home equity on more favorable terms (more on this below), and though older generations are carrying more mortgage debt and later into life than previous ones (Masnick, Di, and Belsky, 2005), most homeowners do pay down their principal to some extent. Since many people have trouble saving and have to make a housing payment one way or the other, owning a home can overcome people's tendency to defer savings to another day.

Fourth, there are substantial tax benefits to owning. Homeowners, as noted when discussing the user cost equation, are able to deduct mortgage interest and property taxes from income and, even more importantly, are not taxed on their imputed rent. While low-income households may not be able to benefit from the deductions because their standard deduction is higher, they do benefit from not being taxed on their imputed rent. Landlords are taxed on their rental income, and must charge rents in a competitive market that, over the long run, must cover those extra costs. Although much of the focus in public policy debates is on the value of the mortgage interest deduction, by most estimates the value of not having to pay tax on the equivalent rent for their homes is even greater (Gyourko and Sinai, 2003). As Case (2010) has pointed out with respect to imputed rent: “This part of the yield (to home investment) is counted as national income . . . It is the equivalent of about a 6 percent return on your investment after maintenance and repair, and it is constant over time in real terms. Consider it this way: when Enron went belly up, shareholders ended up with nothing, but when the housing market drops, homeowners still have a house. And this is a tax free benefit.” On top of all this, capital gains up to \$250,000 are excluded from income for single filers and up to \$500,000 for married couples if they sell their homes for a gain.

Fifth, interest on home equity loans up to \$100,000 over original acquisition indebtedness is also deductible from income. If the loan is secured it has the additional advantage of carrying a lower rate than an unsecured loan. Thus, borrowing to finance consumption or investment through a home equity loan lowers borrowing costs.

Sixth, during periods when home prices and rents are both on the rise, owning is a hedge against inflation, and if the owner has a fixed-rate mortgage or no mortgage left at all, then a large portion of their housing payments are fixed and only their property taxes and utility costs float up or down (Sinai and Souleles, 2005). As noted, housing costs and rents have tended over most time periods to go up at or higher than the rate of inflation, making owning an attractive proposition.

As for the fact that leverage means risk is symmetrical—just as positive returns are amplified, small drops in value can wipe out a small down payment—in our country the upside potential is unlimited while the downside is usually limited to the initial down payment (unless a lender is in a state where deficiency judgments are permitted and they exercise this right). From a practical point of view, for low-

income households with little to invest but that are able to get low down payment loans, rolling the dice on homeownership may be the only way they have a chance to build a significant asset of any material worth.

This not to sugarcoat the risks associated with homeownership. Indeed, the recent past shows the downside risk can be formidable. Even before these events, it was clear that prices at the local level were more volatile than at the national level and can cycle rather strongly depending on local land use regulations, supply and demand balance, and both positive and negative economic shocks.

Americans faced with the choice to own or rent need to reflect on these risks, try to assess where they may be in the home price cycle, and do more of what economists urge us to do—think about the probabilities associated with the future course of important variables and gauge their own appetite for risk and return. When they do so, they may well conclude homeownership is worth the risk even if they rely less on rules of thumb and more on detailed analysis.

There are surprisingly few studies of the impact of owning on financial outcomes after controlling for initial wealth and other factors that might cause the *ex post* result of homeowners having so much more net wealth even after controlling for income than renters. The one that comes closest was fitted over a period of time that was not punished by the greater than a third drop in home price measures nationally that occurred after 2006. Di, Belsky, and Liu (2007) examined the experience of homeowners and renters over the period 1989-2001 using the Panel and Survey and Income Dynamics. The authors controlled for each household's initial wealth in 1989, location, income, education, and other characteristics that might have influenced rates of wealth accumulation. It also controlled for the propensity of households to accumulate wealth in the five years leading up to 1989 to account for the possibility that some unobserved characteristics may have been associated with the probability of owning and the duration of owning. They found that both the choice to own and the length of owning were positively associated with greater wealth accumulation, even though this was a period of abnormally high returns on other assets like stocks, while house price growth nationally was in line with long-term averages but rent increases below them. Another, earlier, study by Boehm and Schlottmann (2002), also using Panel Survey of Income Dynamics, found that, after controls, the children of homeowners also tend to achieve higher levels of education (perhaps because their parents can borrow against their equity to finance their children's education), own homes sooner, and accumulate more wealth than the children of renters.

When people look around, they see the *ex post* results of homeownership and these results can easily lead them to conclude a bet on homeownership is a good one. Indeed, the gaps in wealth between owners and renters, even controlling for income, are stunning (Figure 13). Even assuming that this in part reflects the fact that failed homeowners who return to renting skew the results of renting, the gaps are hard to dismiss and undoubtedly people form a favorable impression of the financial possibilities of homeownership by looking at them.

The reality is that the financial outcome of the decision to buy or rent is very complicated (Figure 14). Buying a home entails risk, and whether owning proves to be a better choice than renting depends on

market wide conditions as well as a slew of idiosyncratic factors, including an individual's holding period, the timing of purchases and sales with respect to house price cycles, the number of times homes are bought and sold, whether the right to refinance is exercised when the option is in the money, and whether the mortgage interest rate a person has carried is the lowest rate for which they could qualify at the time they took out loans.

Conclusions

Americans yearn for homeownership. Most think it makes more financial sense than renting and plan to buy again or buy for the first time at some point in the future. They associate homeownership with greater control over their lives, less insecurity of tenure, and better communities. Still, their ability to sate their appetite depends importantly on if they get a loan and cover the costs of buying.

Many have questioned whether the longing for homeownership has been lastingly diminished by the housing crisis, especially among the young. This paper raises doubts that this is likely. It is more likely that when prices and rents rise for a time—as they have begun to in more than half of metropolitan areas already—the interest in satisfying this appetite by buying will reset. As this occurs, homeownership rates, controlling for predictable age, income, and family status differences, will likely start to stage a recovery. But it is also very possible that this recovery will be hampered by persistent difficulties in getting a home purchase loan.

There are many reasons to believe that the instinct of most Americans that owning at many points in time and many places makes more sense is right. Certainly the wealth distribution of the US has been powerfully influenced by past differences in access to mortgage credit to buy homes and the types of mortgages homebuyers were able to obtain.

That does not mean, though, that would-be homeowners should not consider the circumstances under which they are buying a home and their own appetites for risk before making a choice. In doing so they should be aware of potential biases in decision making under future uncertainty that may lead them to misjudge probabilities and overestimate their chances of coming out ahead by owning. And they should know when refinancing is in their best interest and act, as well as what the terms and conditions of their loans will mean to any future repayment risk and to the overall interest costs they will bear over the expected life of their loan. For these reasons, government efforts to counsel and inform homebuyers are worthwhile.

The irony is that the tendency to form expectations about the future from the recent past, together with the tendency for lenders to charge most for credit risk when it is least (Zorn and Courchane, 2011) and so keep standards tight at the same time, means that many may miss out on the bottom of the housing market.

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Appendix 1

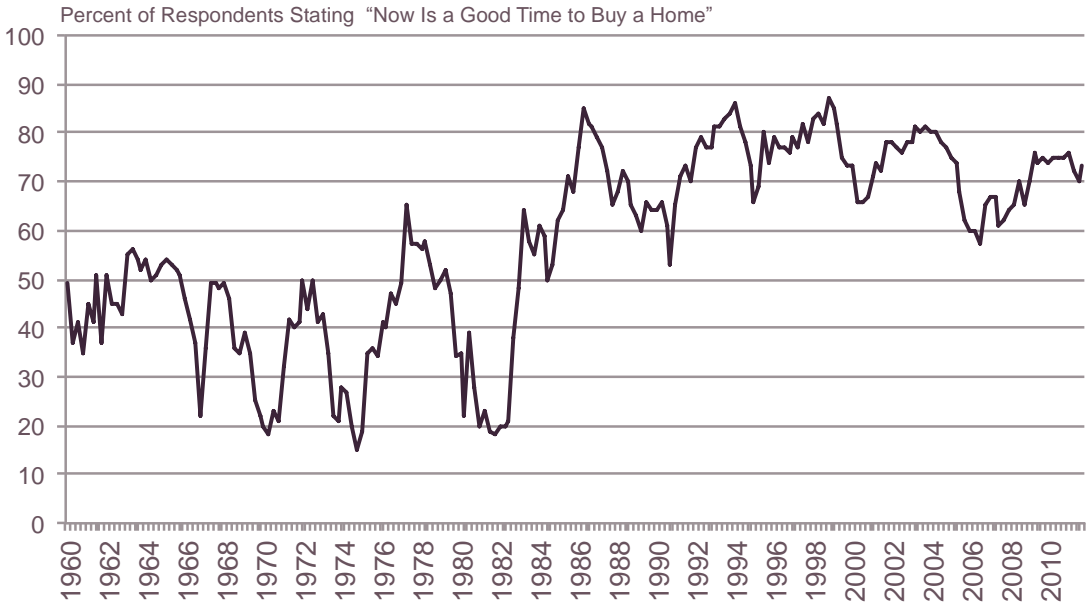
Homeownership Rates by Age and Household Type

	1994	2000	2004	2009
Under 35				
Married without Kids	46.36	54.18	58.29	53.23
Married with Kids	56.99	62.11	62.97	59.89
Single Parent	17.77	22.90	23.00	22.64
Other Family	32.99	40.97	50.13	47.76
Single Person	24.75	23.50	26.86	24.20
Non Family	18.49	21.03	23.07	22.69
35-44				
Married without Kids	71.42	73.03	75.23	73.04
Married with Kids	79.51	81.93	82.69	80.15
Single Parent	43.75	49.27	48.96	44.85
Other Family	47.44	50.60	57.34	50.56
Single Person	40.11	43.25	49.32	44.41
Non Family	49.90	51.33	52.16	52.23
45-54				
Married without Kids	85.53	87.99	87.69	85.62
Married with Kids	85.02	87.05	88.65	87.79
Single Parent	57.09	60.00	62.91	58.60
Other Family	62.66	60.32	63.04	65.21
Single Person	52.78	53.88	57.13	53.73
Non Family	58.18	66.29	60.30	59.68
55-64				
Married without Kids	89.52	90.12	91.99	90.89
Married with Kids	80.85	83.22	85.48	86.37
Single Parent	51.93	69.63	59.27	62.27
Other Family	72.84	70.39	76.16	68.64
Single Person	60.21	63.44	64.05	63.51
Non Family	64.31	68.38	73.52	71.00
65 and over				
Married without Kids	90.49	91.60	91.76	91.12
Married with Kids	84.25	81.73	86.55	83.28
Single Parent	-	-	69.94	53.42
Other Family	78.94	82.58	82.92	82.86
Single Person	64.38	69.16	69.64	68.81
Non Family	72.48	71.67	74.56	77.80

Note: Cells represented by a " - " have a sample size less than 30.

Source: Joint Center tabulations of US Census Bureau, Current Population Surveys

Fig. 1 Opinions on “Good Time to Buy” Vary with Market, Economy



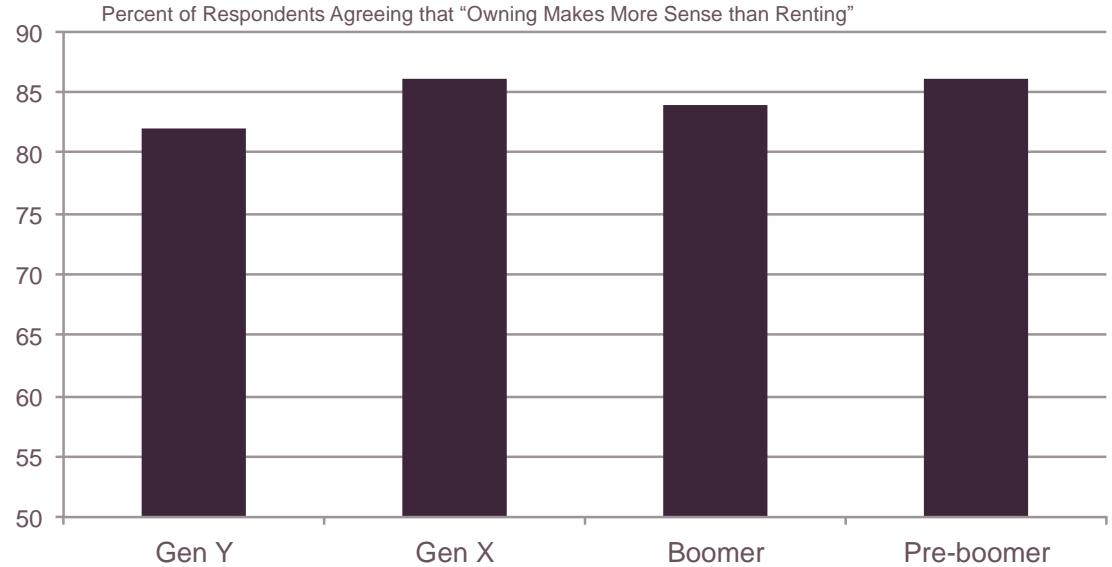
Source: Thomson Reuters & University of Michigan, Survey of Consumers.



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Fig. 2 Majority of All Age Groups Think Owning Makes More Financial Sense Than Renting



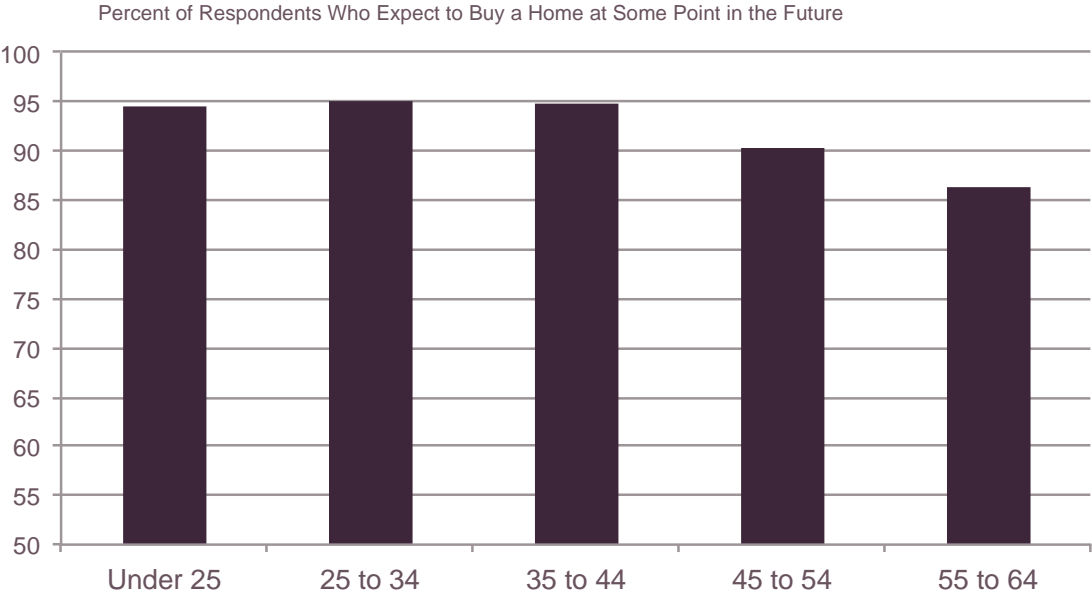
Source: Fannie Mae, National Housing Survey Q1 2012.



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Fig. 3 A Majority of All Ages Expects to Own



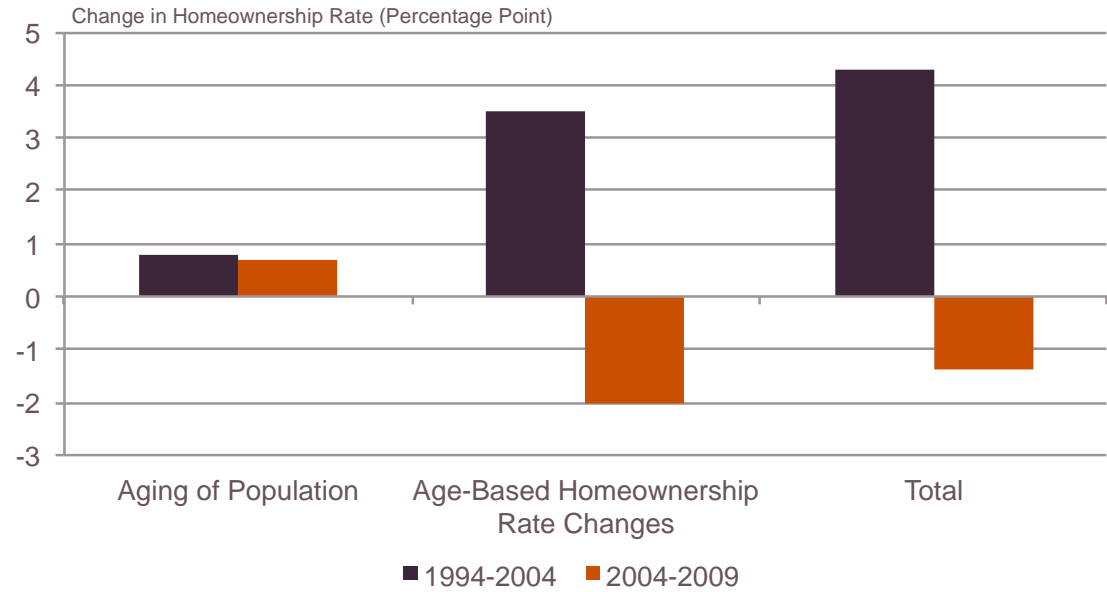
Source: Drew and Herbert, 2012.



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Fig. 4 Composition of Changes to Homeownership Rate

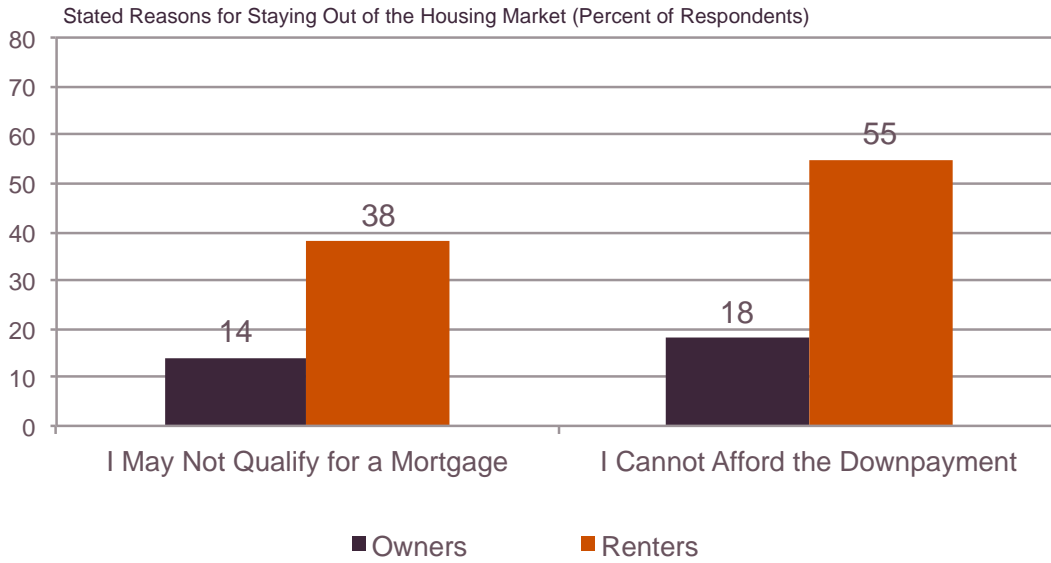


Source: JCHS tabulations of US Census Bureau, Current Population Surveys.



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Fig. 5 Financing Constraints Weigh Heavily, Keeping Some Out of Market



Source: Hanley Wood Housing 360 Survey, June 2011.

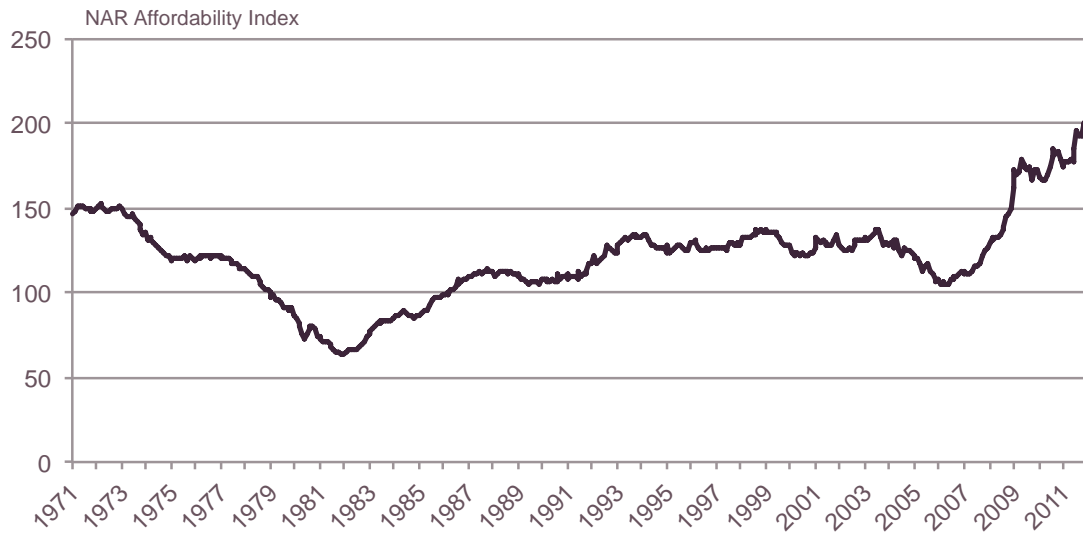


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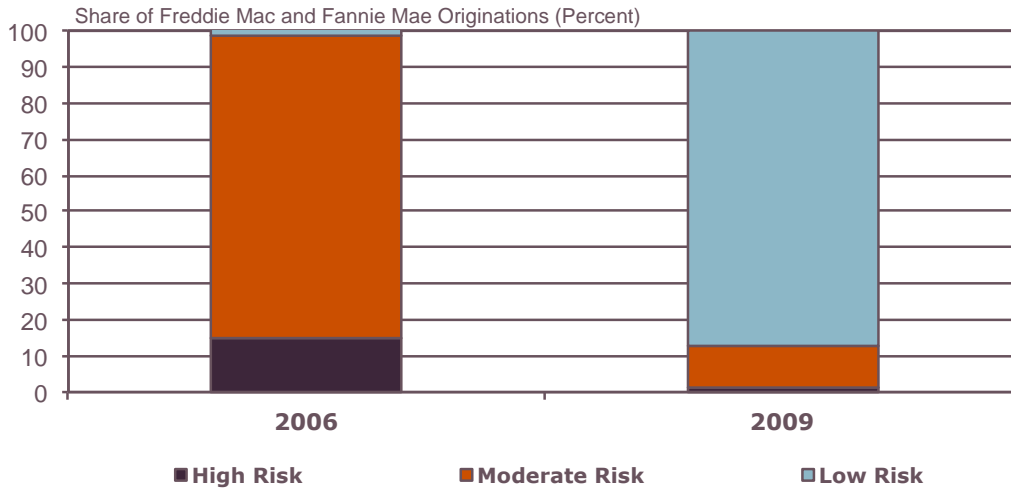
Fig. 6 Homeownership Is at Its Most Affordable Since At Least 1971



Notes: According to the NAR (<http://www.realtor.org/topics/housing-affordability-index/methodology>) a value of 100 means that a family with the median income has exactly enough income to qualify for a mortgage on a median-priced home. Their calculations assume a 20 percent down payment and a qualifying ratio of 25 percent.
Source: NAR Composite Affordability Index.



Fig. 7 GSEs Have Moved Toward Lower-Risk Loans



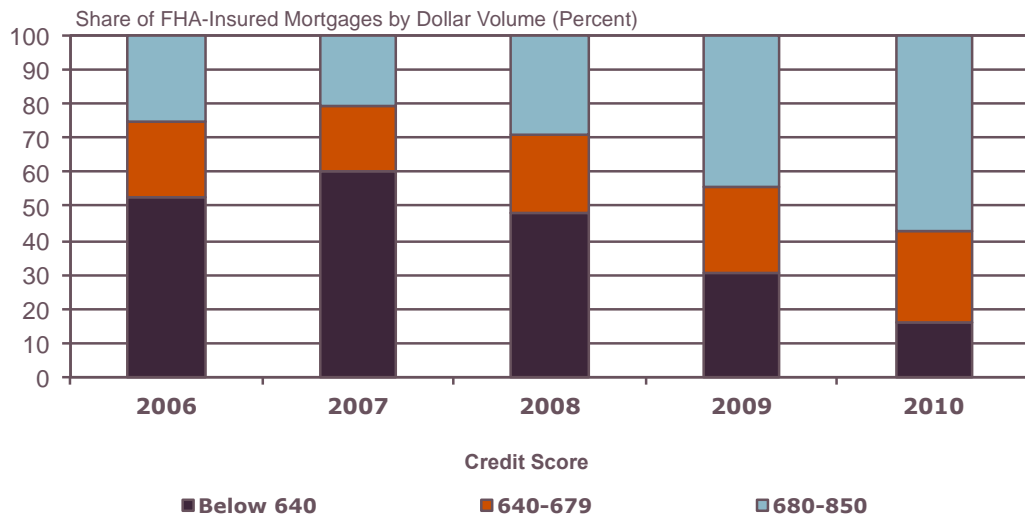
Notes: High (low) risk loans are to borrowers with credits scores under 690 (above 750) and have loan-to-value ratios above 85% (below 75%).
Source: Barclays Capital, *GSEs: Back to the Future, US Interest Rates Strategy, 2009*.



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Fig 8. Government-Backed Credit Has Constricted



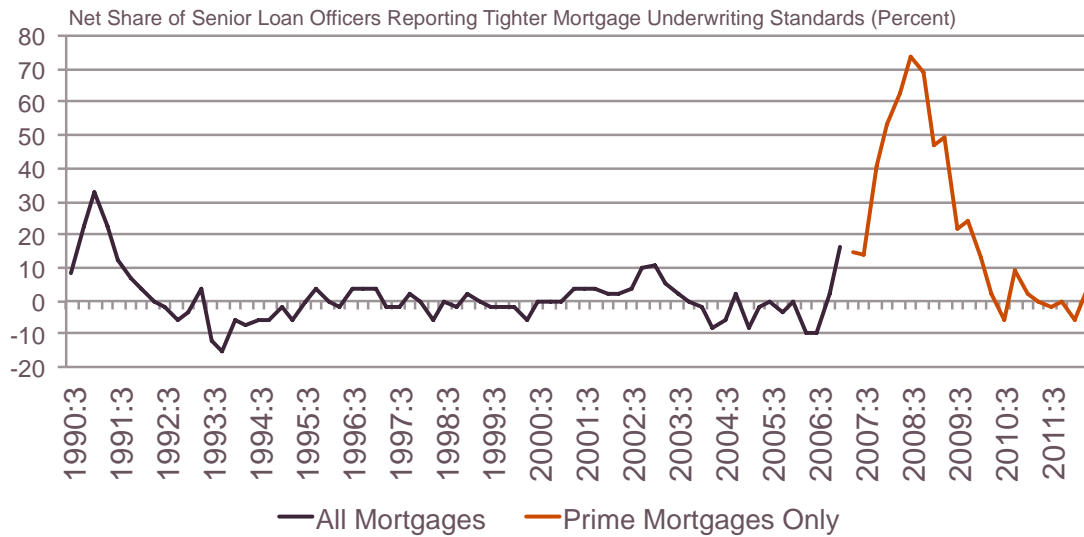
Note: FHA data exclude records with no credit score information.
Source: US Department of Housing and Urban Development.



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Fig. 9 Loan Officers Report Tighter Credit Standards



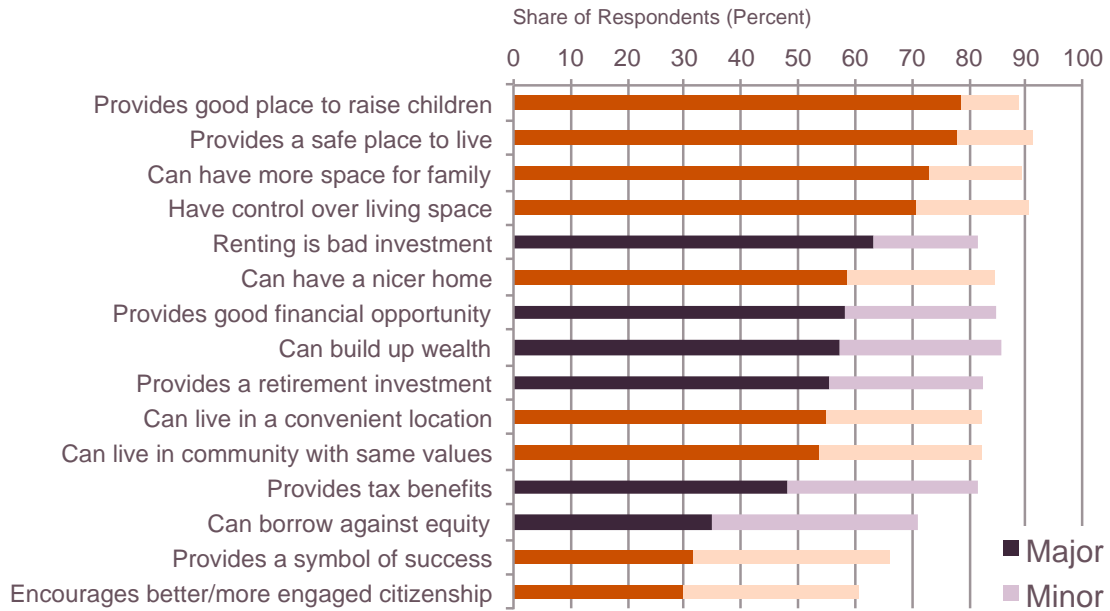
Note: Data series for all mortgages was replaced by individual series for prime and subprime loans in 2007.
 Source: JCHS tabulations of the Federal Reserve Board, Senior Loan Officers Survey.



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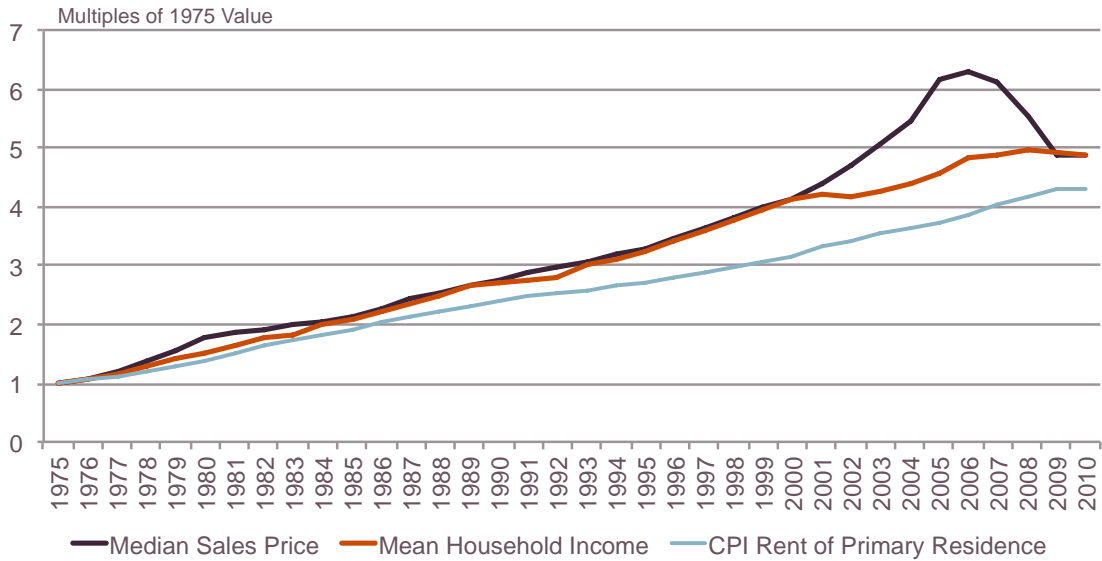
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Fig. 10 Lifestyle Issues Top List of Reasons for Buying a Home



Note: Orange bars are considered lifestyle reasons while purple bars are considered financial reasons for buying a home.
 Source: Drew and Herbert, 2012.

Fig. 11 Over Long-Run, House Prices Tend to Rise With Average Household Incomes

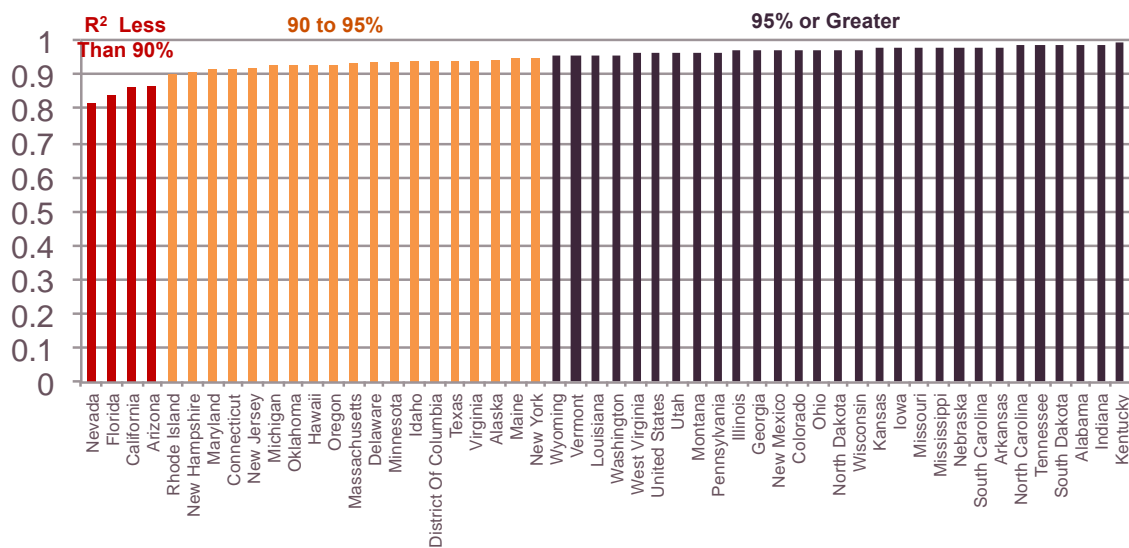


Note: All values are in nominal dollars.
 Sources: NAR Median Sales Price, Existing Single Family Homes; Moody's Economy.com tabulations of US Census Bureau CPS data; Federal Reserve Economic Data tabulations of Bureau of Labor Statistics Consumer Price Index.



Figure 12 Changes in State House Prices Tend to Follow Per Capita Incomes

R-Squared (Regressing HPI to Per Capita Income, 1975-2011)



Sources: JCHS tabulations of FHFA HPI and US Bureau of Labor Statistics data, via Moody's economy.com

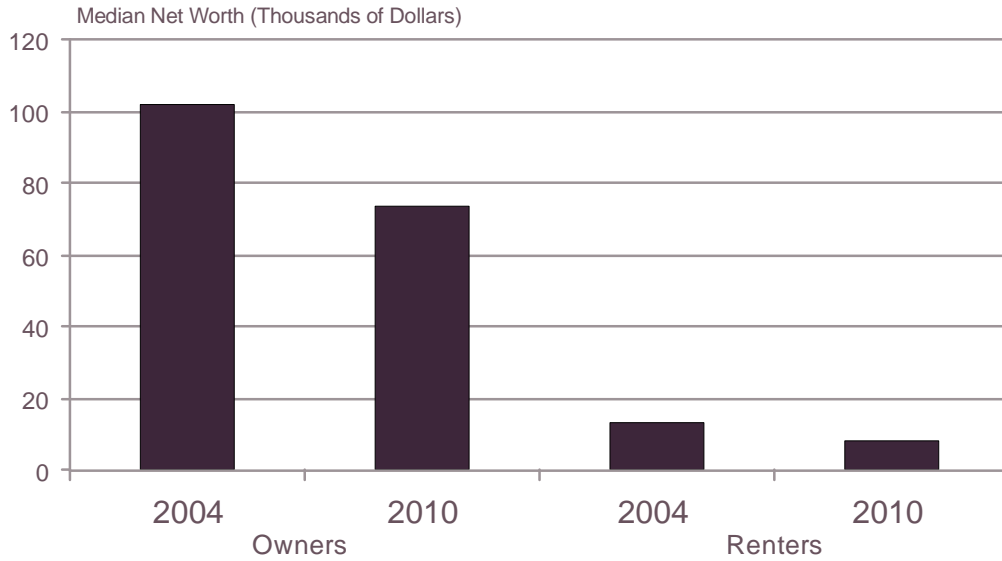


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Fig. 13 Even After Controlling for Income, Owner-Renter Wealth Gaps Are Extensive



Note: All values are in 2010 dollars.
Source: Joint Center tabulations of Board of Governors of the Federal Reserve System, Survey of Consumer Finances.



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Fig. 14 Conceptual Model of Lifetime Returns from Tenure Choices

