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The Effects of the Real Estate Bust on Renter Perceptions of Homeownership

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Abstract

After almost a decade of strong price appreciation, the housing market fell into a steep decline in 2007. By 2008, foreclosure filings on owner-occupied homes were surpassing record levels. Due to the housing downturn, fewer renters may aspire to own a home, which could have lasting implications for neighborhoods and household asset building. This study analyzes the impact of the housing downturn on renters' intent to purchase a home, their perceptions of the risks and benefits of homeownership, and their interest in information and advice concerning homeownership.

Based on a survey of 400 low- and moderate-income renters in the San Francisco Bay Area, most renters continue to aspire to homeownership, especially renters who are younger, who have higher incomes, and who speak English at home. In addition, lower-income and minority renters, as well as renters who reside in zip codes with greater exposure to foreclosures, have more negative perceptions of homeownership. Together, these findings indicate the housing downturn produced shifts in renters' aspirations to own a home and the expected risks and benefits of owning a home that vary by residential location and demographic characteristics.

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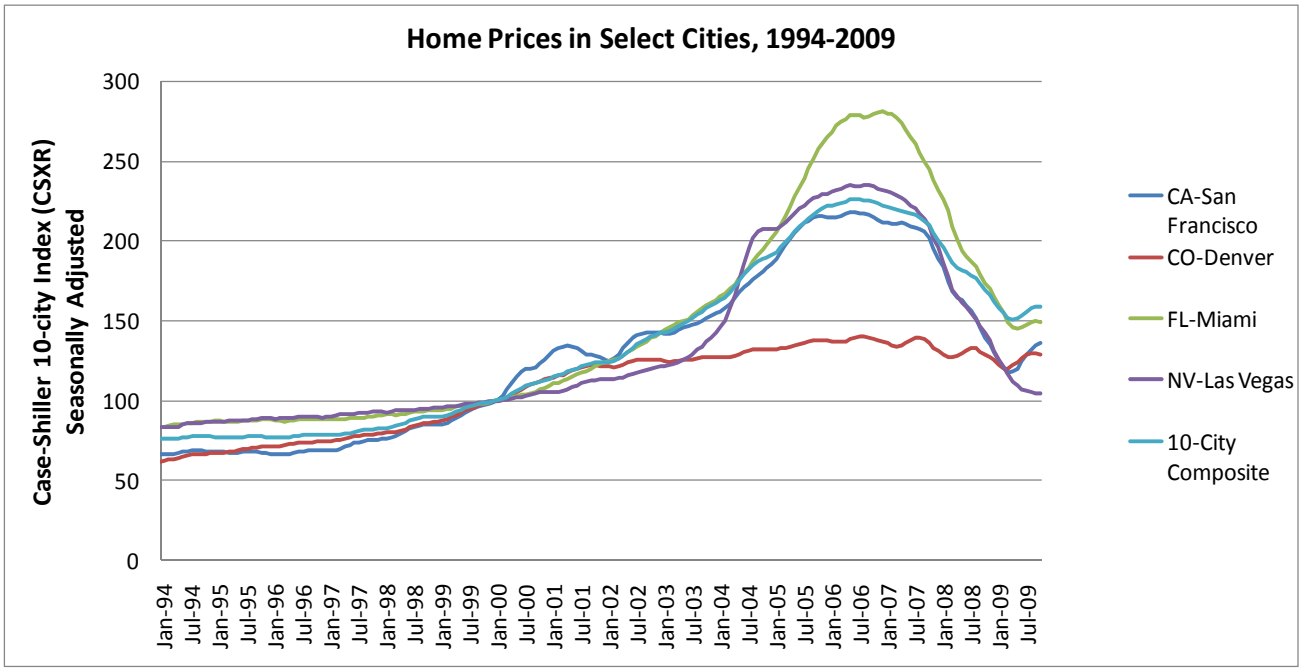
Introduction

The U.S. housing market entered a period of significant growth in the early 2000s, fueled by low interest rates and easy access to credit. Figure 1 shows changes in housing prices between 1994 and 2009 from the seasonally adjusted Case-Shiller 10-city composite index, including the trends in four U.S. housing markets. The Case-Shiller composite index is a weighted index of housing prices in 10 metropolitan statistical areas (MSAs). The index adjusts for housing quality and is standardized such that housing values, both within each MSA and for the index as a whole, are set at 100 in January 2000. Trends before 1994 were similar to the trends observed between 1994 and 2000, with housing prices increasing much slower than they did between 2000 and 2006. Home prices increased at record levels from 2000 to 2006. The seasonally adjusted 10-city composite index indicates that housing prices increased 125 percent from January 2000 to their peak in April 2006 (see Figure 1). The run-up in housing prices varied dramatically across MSAs. Between January 2000 and April 2006, prices increased 135 percent in Las Vegas and 178 percent in Miami. In contrast, prices increased just 38 percent in the Denver MSA, representing the lowest increase among the MSAs that comprise the 10-city index. In San Francisco, the site of this study, housing prices increased 115 percent from January 2000 to April 2006.

Figure 1



The Bush administration made homeownership an explicit policy priority and promoted it as a central component of an "Ownership Society." To this end, the administration introduced programs including the American Dream Downpayment Initiative, the homeownership voucher, and the President's Blueprint for the American Dream Partnership. New and "exotic" mortgage products further encouraged first-time buyers to enter the housing market. Consequently, first-time homebuyers accounted for a sizeable share of home purchases. According to the National Association of Realtors, first-time buyers bought 42 percent of the homes purchased in 2001, 40 percent of the homes purchased between 2002 to 2004, and 36 percent of the homes purchased in 2005 (Bishop, Bickicioglu, and Hightower 2006).

In stark contrast to the price increases that occurred from 2000 to 2006, the housing market peaked in 2006 and fell into rapid decline in 2007. Home prices began to fall precipitously, and many of the cities that experienced dramatic gains earlier in the decade suffered equally dramatic losses once the crisis hit. Beginning in March 2007, housing prices in

the seasonally adjusted Case-Shiller 10-city composite index declined for 27 consecutive months. Although the San Francisco housing market experienced a notable price decline, the decline was more moderate and perhaps more typical than the extreme cases of Miami and Las Vegas. While housing prices declined 48 percent in Miami and 52 percent in Las Vegas between February 2007 and May 2009, prices declined 44 percent in San Francisco. Consistent with the relatively modest price increases in Denver earlier in the decade, home prices there declined by 9 percent. Nationally, prices declined by 32 percent from February 2007 to May 2009, again based on the seasonally adjusted Case-Shiller data.

In addition to declining home values, non-traditional mortgage products, particularly adjustable rate mortgages, became increasingly unaffordable. Unsustainable mortgages and the overall economic slowdown caused mortgage foreclosure rates to soar in 2008. Due to concerns about loan performance and weak economic conditions, financial institutions significantly tightened their mortgage lending standards, which reduced the flow of credit to potential homebuyers. A Federal Reserve survey of loan officers found that about 75 percent of U.S. banks tightened their lending standards on prime home mortgages in the second quarter of 2008, a figure that softened to about 20 percent in the second quarter of 2009 (Board of Governors of the Federal Reserve System 2009). Banks have not offered explicit reasons why their lending standards have changed. The general assumption is that the combination of weak economic conditions, poor loan performance, high rates of foreclosure, and declining home prices are principally responsible for this change.

The crisis that began in 2007 has had a significant impact at the household and community levels. Policymakers have been especially concerned about areas that have experienced disproportionately high foreclosure rates. For instance, one program that targets

areas with high foreclosure rates is the Neighborhood Stabilization Program, which focuses on areas hit hardest by foreclosure and has provided grants to 254 communities (www.hud.gov/nsp/). Concerns about concentrated foreclosures stem from the associations between foreclosure and a host of negative outcomes. Foreclosure has been associated with blight as well as losses in tax revenue to local governments (Moreno 1995). Scholars have also linked foreclosures to increases in violent crime (Immergluck and Smith 2006). Furthermore, foreclosures have been associated with neighborhood destabilization and reductions in surrounding property values (Lin, Rosenblatt, and Yao 2009; Rogers and Winter 2009). At the household level, people who lose their homes to foreclosure incur significant equity losses and often suffer displacement and housing instability (Erlenbusch et al. 2008), as well as economic hardship.

Aside from these more readily observable impacts, the housing downturn may have an additional effect on renters. To the extent that households follow a progression from renting to owning, today's renters represent tomorrow's homeowners. The housing crisis may negatively affect renters' aspirations to own a home and their perceptions of the risks and benefits of homeownership. For example, viewing media stories about people losing money in real estate, hearing about neighbors who are stuck with "underwater" mortgages, or knowing individuals facing foreclosure may alter renters' views of homeownership. If these perceptions persist, renters may be discouraged from becoming homeowners in the future. In turn, reduced interest and participation in homeownership could have lasting implications for neighborhoods and household asset building.

This analysis focuses on perceptions of homeownership among low- and moderate-income (LMI) populations. Many public policies for first-time homebuyers have focused on LMI

populations. Homeownership has long been heralded as an important mechanism for asset building and financial stability, and it has been shown to contribute to wealth accumulation among LMI populations (Turner and Luea 2009). Nevertheless, the lower-priced segment of the housing market has experienced particularly large declines in values and higher rates of foreclosure (Joint Center for Housing Studies of Harvard University 2009). Subprime lending and foreclosures have been concentrated in neighborhoods with relatively high proportions of minority residents and lower-income households. This pattern occurs in neighborhoods across the country (Apgar and Herbert 2005; Calem, Hershaff, and Wachter 2004; Ding et al. 2008; Perkins 2009). With foreclosed properties selling at steep discounts, homeowners in low-income neighborhoods are experiencing some of the largest declines in home prices (Joint Center for Housing Studies of Harvard University 2009). Thus, LMI populations are more likely to be exposed to the negative effects of the housing downturn, both personally and in their communities, so their perceptions of homeownership may be especially likely to have shifted in response to the housing downturn.

This study uses data collected from an internet survey of LMI renters in the San Francisco Bay Area to examine changes in their perceptions of homeownership following the housing downturn. The survey data is matched with foreclosure and home price data at the zip code level. Using this matched sample, this analysis examines the relationships among renter demographics including race, income, and length of tenure, as well as zip code level indicators of foreclosure rates and changes in home values, and three categories of outcomes: (1) renters' intentions to purchase a home (2) renters' perceptions of the risks and benefits of homeownership; and (3) renters' interest in homebuyer counseling and education. The findings

are useful for policymakers, housing developers, and housing advocates in their future efforts to encourage affordable homeownership as the economy and housing market stabilize.

Literature Review

Four strands of literature shed light on how the housing downturn may affect renters' perceptions of homeownership. The first strand examines the negative impacts of foreclosure and declining home prices at the community level and to a lesser degree at the household level. The second strand analyzes the impact of foreclosure on renters' housing status. The third strand focuses on how perceptions and behavior respond to risk and negative events. The final strand of literature examines whether consumers' demand for advice and information increases in response to economic crises.

The impact of the housing downturn at the community and household levels

The housing downturn is associated with a host of adverse impacts at the community and households levels. Perhaps the most obvious economic and social costs include the loss of wealth and the reduced availability of credit. The loss of wealth caused by the housing downturn stems from losses in home equity, short sales, and foreclosures. The incidence of mortgage and tax foreclosures is associated with declining property values in areas proximate to foreclosures (Immergluck and smith 2006; Schuetz, Been, and Ellen 2008). Due to declining home values, communities with higher foreclosure rates receive less property tax revenue for public services at the same time the demand for public services increases. Apgar, Duda, and Gorey (2005) find that in addition to reduced tax revenues, foreclosures impose significant direct costs on local governments for services including inspections, court actions, and police and fire department efforts. In turn, increased allocations for these public services necessitate funding reductions for other municipal services. In the past, higher foreclosure rates have been linked to increased

violent crime activity (Immergluck and Smith 2006), which raises concerns that violent crime will increase due o the current housing downturn.

The downturn in the housing market, and in the broader economy, can have negative emotional effects at the individual and household levels, which may then harm social networks at the community level. A recent study, Bennet, Scharoun-Lee, and Tucker-Seeley (2009) suggests that the housing crisis may be linked to a range of adverse psychological and physical health outcomes including chronic stress and depression. Since individuals with lower socioeconomic status have greater and more severe exposure to foreclosure, they may have less access to resources to help them cope with foreclosure. Therefore, they may be especially vulnerable to the adverse health impacts of foreclosure (Bennett, Scharoun-Lee, and Tucker-Seeley 2009). Scholars have also found that feelings of limited personal control over a situation intensify depression (Benassi, Sweeney, and Dufour 1988). Since individuals have no ability to stop home prices from declining, housing downturns may potentially exacerbate feelings of stress and depression. Nonetheless, there is little empirical research on the impact of the housing crisis on the social and emotional life of families. This stems in part from the difficulties associated with identifying and tracking families affected by foreclosure (Kingsley, Smith, and Price 2009). While the literature in this area provides insight into how foreclosure affects individuals and their communities, it does not directly address renters' response to downturns in the housing market. However, it appears that to the extent renters and homeowners interact and discuss the local housing market at work, at school, and in other community contexts, the effects of the housing downturn influence renters' perceptions of homeownership.

The impact of the housing downturn on renters' housing status

The existing literature suggests the housing downturn affects renters' wellbeing through a few primary mechanisms. Some renters are directly and immediately harmed by the housing crisis, since foreclosures on non-owner occupied properties may result in tenants being evicted (Joint Center for Housing Studies of Harvard University 2008; Pelletierre 2009). Low-income households tend to have lower rates of homeownership relative to higher-income households and are more likely to be renters (Haurin, Herbert, and Rosenthal 2007). Furthermore, the incidence of foreclosure is typically greater in low-income communities than in communities with higher incomes (Bostic and Lee 2008). Thus, low-income renters may be particularly exposed to the negative impacts of foreclosure, either through first-hand experience or indirectly through friends, family members, or neighbors who are dealing with foreclosure.

Although this paper focuses on the potential harms of the housing downturn on renters, it must be noted that the foreclosure crisis has led to significant price reductions in the housing market. Along with policy initiatives including the $8,000 first-time homebuyer tax credit that was implemented in January 2009 (a $7,500 credit was available when the survey in this analysis was conducted), price reductions may encourage qualified renters to pursue homeownership. Nevertheless, efforts to encourage homeownership and bolster the housing market likely have a greater impact on borrowers with higher incomes than on LMI renters who are the focus of this study. Low-income renters face many barriers to homeownership, including low levels of wealth, poor credit histories, and limited access to credit (Rosenthal 2002). These factors may preclude them from taking advantage of current market conditions. Yet, for renters who can overcome the barriers to homeownership, the foreclosure crisis creates a unique opportunity to take advantage of a favorable pricing and policy environment.

How consumers' perceptions and behavior respond to risk and negative events.

Prior research on the effects of foreclosure on consumers' perceptions of homeownership is limited. However, there is literature that examines how other types of large-scale negative events impact consumer behavior and decision making. For instance, Giuliano and Spilimbergo (2009) find that macroeconomic shocks affect the formation of socioeconomic beliefs. Individuals who live through an economic recession in early adulthood tend to believe that success in life depends more on luck than on hard work, are more likely to support government redistribution efforts, and have less confidence in public institutions. The effects of macroeconomic shocks continue to influence people into their 40s, after which time negative shocks appear to have less impact (Giuliano and Spilimbergo 2009). In a study not directly related to economic crises, Västfjäll, Peters, and Slovic (2008) find that being reminded about a major environmental disaster leads to a more pessimistic view of the future and an increased perception of risk, even among individuals who are not directly affected by the disaster. Together, these two studies indicate that individuals' perceptions shift in response to broad economic and social events. Consequently, these studies lend empirical support to the present hypothesis that the housing downturn has influenced renters' perceptions of homeownership.

Past studies have also found that behavior changes in response to negative events. Browne and Hoyt (2000) find that flood damages in the US are largely uninsured losses. Further, individuals tend to purchase flood insurance after a flood since their perceptions of the probability of experiencing losses due to a flood have shifted. More generally, individuals use past experience as a guide to mitigate negative risk and are influenced to purchase insurance if they know someone else who has purchased coverage (Kunreuther 1984). Other large-scale negative events, including events related to financial markets, can also influence behavior. Osili

and Paulson (2009) find that individuals who experience a systemic banking crisis are less likely to have bank accounts in the future. Chari and Jagannathan (1988) conclude that individuals assess bank performance and asset quality based on other investors' withdrawal decisions, even if nobody has adverse information about the bank. Overall, these studies demonstrate that negative events not only influence risk perceptions, but also encourage risk mitigating behavior. Given that foreclosure is perceived as a negative event, one could hypothesize that potential homebuyers exposed to high rates of foreclosure alter their perceptions and behavior concerning future homeownership.

Consumers' demand for information and advice in response to economic crises

Given the potential impact of the housing crisis on socioeconomic beliefs and risk mitigating behaviors, individuals who desire to invest in a home may proceed more cautiously and seek more advice and information in an effort to reduce the risks of homeownership, rather than avoiding homeownership altogether. In a study of portfolio investors who were active during the Korean currency crisis of 1997, Kim and Wei (2002) find that investors' trading behavior is potentially related to differences in their information levels. The authors conclude that policies that encourage investors to acquire more information may be beneficial. Similarly, first-time homebuyers interested in investing in the housing market may benefit by acquiring more information and may behave differently than individuals who have less information. In the context of this study, renters may report increased interest in homebuyer education and counseling in response to the housing crisis.

Data

The data were collected using an online survey panel of renters ages 18 to 65 with household incomes under $75,000 in the nine county San Francisco Bay Area, which includes

Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma Counties (see Table 1). The panel was provided by the online data firm Zoomerang, which is a subsidiary of MarketTools, Inc. [http://info.zoomerang.com]. The data were collected as part of a project by HomeownershipSF, a nonprofit collaborative of housing service providers, to assess the local need for housing counseling. Over a three day period, Zoomerang recruited 400 participants from its panel by offering incentive points for completing the survey. Through its ZoomPanel website, Zoomerang offers individuals opportunities to complete web-based surveys for points that can be exchanged for goods and services. In an effort to include hard-to-reach groups and make the panel more representative, Zoomerang partners with direct marketing agencies. While the survey panel was provided by Zoomerang, the survey was developed for HomeownershipSF. The survey was administered in August 2008, after the intense focus on subprime foreclosures and related problems in the financial markets, but before the federal government's major interventions into the credit markets in September and of October 2008. Table 1 provides the distribution of zip codes by county along with selected geographic characteristics. The sample is comprised of 153 of the 454 zip codes in the nine county region.

Table 1: San Francisco Bay Area Counties

County Name	Total Population	n=	Zip Codes in Each County	Zip Codes in Sample	Median Household Income 2007
Alameda	1,443,741	93	72	32	$68,263
Contra Costa	948,816	49	55	24	$76,317
Marin	247,289	11	41	6	$83,910
Napa	124,279	6	12	3	$61,988
San Francisco	776,733	74	57	19	$67,333
San Mateo	707,161	37	39	17	$82,913
Santa Clara	1,682,585	77	109	35	$84,265
Solano	394,542	5	18	2	$66,575
Sonoma	458,614	25	51	15	$62,279
TOTAL	**6,783,760**	**377**	**454**	**153**	**$74,732**

Source: 2000 Census. Household income data from Census Bureau County Quick Facts

Web-based surveys have grown in popularity in large part because they are cost-effective and relatively easy to administer (Lazar and Preece 1999). Despite these significant advantages, web-based surveys are also prone to certain biases. In particular, incentive-driven web surveys may suffer from selection bias since participants self-select into the sample. Individuals who elect to take an incentive-driven web survey likely differ from individuals who do not elect to take the survey, which raises concerns about the survey's generalizability. Online survey respondents often differ in terms of socioeconomic status, ethnicity, and education relative to the general population, which includes individuals who lack internet access (Andrews, Nonnecke, and Preece 2003). As mentioned above, Zoomerang is cognizant of these concerns and reaches out to individuals who lack internet access in an effort to broaden its panel. Despite concerns about the sample's composition, this analysis is primarily focused on within sample differences based on neighborhood and individual characteristics. Even if the overall sample is biased on observable factors, within sample correlations with demographic and market factors should still be valid indicators of the direction and magnitude of within group differences. Generalizations to broader populations obviously must be approached more cautiously.

The data provide a snapshot of how trends in the real estate market shape renters' opinions of homeownership. This analysis assesses how home prices and foreclosures in consumers' neighborhoods influence their intentions to purchase a home, their assessments of the risks and benefits of homeownership, and their interest in advice and information concerning homeownership, as well as how these outcomes vary by demographic characteristics. These measures provide an indication of renters' perceptions of homeownership in the midst of the housing downturn that began in 2007. As leaders in the housing industry and policymakers focus

on mechanisms to spur a recovery from the housing market's collapse, the results of this analysis can be instructive for forming outreach and product development strategies.

Based on probability theory, the net expected value of homeownership can be assumed to follow a generalized form: Net Expected Value = (benefit)*(θ) - (cost)*(1- θ), where θ is the probability of owning a home without experiencing a foreclosure or realizing a loss in home equity. If problems in the housing market lead to a decrease in the expected probability θ, then the expected value of owning a home will decrease. We do not directly observe respondents' net expected value of homeownership, but we measure several dependent variables that serve as proxies of the net expected value of homeownership. Table 2 provides summary statistics of the survey responses. The outcome measures examined in the analysis are described below.

Renters' intentions to try to purchase a home and their perceptions of the risks and benefits of homeownership

The survey asked participants for their self-reported likelihood of trying to purchase a home within six, 12, and 36 months following the survey. All else equal, each of these responses provides an indication of the net expected value of homeownership. Respondents indicated the likelihood they would try to purchase a home on a 10-point scale, with 10 indicating the individual is very likely to try to purchase a home and 1 indicating the individual is not at all likely to try to purchase a home within the given time period. The mean response increases from 2.5 for the six month period to 3.2 and 5.4 for the 12 and 36 month periods, respectively.

Table 2: Summary Statistics: Coefficients and t-statistics, San Francisco Bay Area Default Perceptions Survey Conducted August 14-18, 2008

	n=	Mean	SD	Min.	Max.
How likely are you to try to buy a home in the next 6 months? (1=not at all, 10=very likely)	377	2.49	2.70	1	10
How likely are you to try to buy a home in the next 12 months? (1=not at all, 10=very likely)	377	3.19	3.03	1	10
How likely are you to try to buy a home in the next 3 years? (1=not at all, 10=very likely)	377	5.36	3.42	1	10
Out of 1,000 people who buy a home this year, how many will be able to sell it for more than they paid for it?	353	402.56	333.50	0	1,000
Out of 1,000 people who buy a home this year, how many will lose their home to foreclosure within 12 years?	364	337.92	267.15	0	1,000
Index of perceived risks of ownership > benefits (1 if risks larger)	377	0.45	0.50	0	1
How likely would you be to recommend that a friend buying a home in your current neighborhood? (1=Not at all likely; 4= Very likely)	377	2.69	1.01	1	4
How hard or easy do you think it would it be for you to qualify for a mortgage today? (1=very easy; 4=very hard)	377	3.49	0.89	1	4
Has your interest in counseling increased in last 12 months?	300	0.22	0.42	0	1
Would you be willing to pay $1 or more to attend a first-time homebuyer education seminar?	377	0.54	0.50	0	1
Age (1=18-35, 2=36-45, 3=46-55, 4=56+)?	376	2.42	1.10	1	4
Minority race/ethnicity? (1=yes)	377	0.36	0.48	0	1
How long have you lived in your home/apartment? (1=<1 year, 2=2-3 years, 3=4-5 years, 4=6-10 years, 5=10+ years)	377	3.07	1.36	1	5
What is your approximate income? (1=$0-12k, 2=12-24, 3=24-36, 4=36-48, 5=48-60; 6=60-72; 7=72-84; 8=84k+)	377	3.39	2.04	0	7
Have you paid a late payment fee on your rent in the last 2 years?	377	0.07	0.25	0	1
Household Size	377	2.44	1.36	1	7
Is the primary language that is spoken at your home something other than English? (1=yes)	377	0.06	0.24	0	1
How would you rate your knowledge of mortgages and interest rates (0 =nothing, 5 =a lot)	377	3.39	0.95	1	5
Zip code % ownership rate 2000 Census	367	51.07	18.77	4.9	94.5
Log Zip code mean Income 2006 IRS filings	377	11.15	0.44	10.3	13.2
Change in Zip code Home Values 9/07-9/08	365	-17.35	12.27	-45.2	6.6
Zip code area foreclosure rate as a share of all properties	377	5.18	3.24	0	14.3

Next, the survey asked renters for their subjective estimates of the probability that people who purchase a home will: (a) lose their home to foreclosure within 12 years ("out of 1,000 people who buy a home this year, how many will lose their home to foreclosure within 12 years?") and (b) be able to sell their home for more than they paid for it ("out of 1,000 people who buy a home this year, how many will be able to sell it for more than they paid for it?"). On average, respondents reported that 338 people out of 1,000 will lose their home to foreclosure within 12 years and that 403 people out of 1,000 will ultimately be able to sell their home for more than they paid for it. Both of these estimates accord with past research which finds that subjective probabilities of negative events tend to be poorly estimated (Fox and Clemen 2005). For instance, the cumulative probability of a subprime homebuyer losing a home to foreclosure is estimated at around 200 out of 1,000 (Gerardi, Shapiro, and Willen 2007). Thus, regardless of the current housing downturn, survey respondents likely overestimated the number of homebuyers who will lose their homes to foreclosure. Likewise, the probability of selling a home purchased in 2008 at a loss is quite low, especially if homebuyers sell their homes several years later. Historically, average home price appreciation five years after purchase based on repeat sales has never been negative and in fact has never been less than 10 percent in total growth in nominal terms since 1970 (Freddie Mac 2009).

Another dependent measure that pertains to renters' perceptions of the risks and benefits of homeownership is a ratio of respondents' ratings of four benefits of owning a home (question 16 in the Appendix, α=.858) to their ratings of four risks of homeownership (question 15 in the Appendix, α=.828). The four benefits of homeownership included in this ratio are having more control over one's housing, price appreciation, personal pride/sense of achievement, and stable housing costs. The four risks included in the ratio are paying too much for a house, failing to

qualify for an affordable mortgage, struggling to keep up with repairs and maintenance, and being unable to keep up with payments. The measures in both of the scales that comprise the ratio were recoded such that a higher response indicated greater perceived risks for the risk measures and greater perceived benefits for the benefit measures. Overall, 45 percent of respondents had higher scores on the scale of risk items than on the scale of benefit items. Renters who reported more risks and fewer benefits are assumed to be less likely to perceive homeownership as a net benefit.

Two other survey questions provide further insight into renters' perceptions of homeownership. One questions asked renters how likely they would be to recommend that a friend purchase a home in the respondent's current neighborhood. This question is a direct measure of renters' perceptions of their neighborhoods rather than of homeownership in general. Responses were measured on a 4-point scale, with 4 being "very likely" and 1 being "not at all likely." The mean response was 2.7, suggesting that respondents had relatively positive perceptions of their current neighborhoods. The final dependent measure of renters' perceptions of homeownership asks respondents to rate how difficult it would be to qualify for a mortgage if they entered the housing market. Responses were again measured on a 4-point scale, ranging from 1 "very easy" to 4 "very hard." The mean response was 1.9, which suggests that renters were relatively confident about the prospect of obtaining financing should they enter the housing market. Nevertheless, the credit crunch that followed the housing downturn began affecting consumers in the late fall of 2008, which was after the survey was administered. Therefore, respondents may have assumed that obtaining mortgage financing would be easier than they would have had the survey been administered at a later point in time. Renters may perceive disruptions in the credit market as a barrier to homeownership. Since the survey was conducted

before the credit crunch, the survey responses may not fully reflect the impact of the credit crunch on renters' perceptions of homeownership.

Renters' interest in homebuyer education and counseling

To assess whether renters' interest in information and advice concerning homeownership increased in response to the housing downturn, the survey asked renters about their interest in and willingness to partake in homebuyer counseling and education. The literature review indicated that individuals seek more information and engage in risk mitigating behaviors during economic downturns. Two measures test whether this is the case in response to the housing crisis. First, the survey asked respondents whether their interest in taking a workshop or getting counseling before buying a home had increased during the past 12 months. Overall, 22 percent of respondents reported that their interest in such programs had increased. In addition, the survey asked respondents how much they would be willing to pay for homebuyer classes and/or counseling. Responses to this question were recoded into a binary variable that indicates whether renters were unwilling to pay anything or were willing to pay at least $1 for homebuyer education and/or counseling. Fifty-four percent of respondents reported that they would be willing to pay at least $1 dollar, which indicates that a majority of respondents were interested in, and in this case willing to pay for, information and advice leading up to homeownership.

Empirical framework

The primary hypotheses in this analysis are:

> H.1. The expected net value of homeownership is lower for renters who live in areas that were more negatively affected by house price declines and foreclosures, as well as for renters from demographic segments of the population that were most affected by negative outcomes in the mortgage market.
>
> H.2. Self-reported willingness to seek homebuyer education is higher for renters who live in areas that were more negatively affected by house price declines and foreclosures, as well as for renters from demographic segments of the population that were most affected by negative outcomes in the mortgage market.

This empirical framework results in a specification, shown in Eq. 1 below, in which Y is one of the eight dependent variables that relates to renters' intentions to purchase a home and their perceptions of the risks and benefits of homeownership: renters' self-reported intent to try to purchase a home in six, 12, and 36 months (three 10-point scales); the subjective probability of selling a home for more than the purchase price (out of 1,000); the subjective probability of losing a home to foreclosure within 12 years (out of 1,000); the likelihood renters would recommend that a friend purchase a home in their current neighborhood (4-point scale); the perceived ease of qualifying for a mortgage (4-point scale); and a ratio indicating that the expected benefits of homeownership exceed the risks. The control variables include the following demographic characteristics for each respondent *i*: categorical age, an indicator for minority race, duration in current rental unit in years, categorical income, an indicator for paying a late fee on a rental payment during the past two years, household size, and a binary variable that indicates whether English is the primary language spoken in the renter's home. Next, the following set of zip code level measures are included for respondent *i* in zip code *z*: mean homeownership rate (2000 census), log mean income based on income tax filing records (2006 IRS), percent change in home values from September 2007 to September 2008 (Zillow Home Value Index from Zillow.com), and foreclosure starts as a share of loans outstanding (2008).

Eq. 1 $$Y^i=\alpha+\beta1\mathbf{AGE}^i+\beta2\mathbf{MIN}^i+\beta3\mathbf{TIME}^i+\beta4\mathbf{INCOME}^i+\beta5\mathbf{MISSED}^i+\beta6\mathbf{HHSIZE}^i+\beta7\mathbf{ESL}^i+\beta8\mathbf{HORATE}^{i,z}+\beta9\mathbf{LNINC}^{i,z}+\beta10\mathbf{CHGVAL}^{i,z}+\beta11\mathbf{FRATE}^{i,z}+\epsilon^i$$

These eight equations are modeled using an OLS regression for the first five outcomes, an ordered probit for the two measures with 4-point scale responses (how likely to recommended that a friend purchase a home in the renter's neighborhood and the perceived difficulty of

qualifying for a mortgage), and a probit for the ratio that compares the perceived risks of homeownership to the perceived benefits. All models use the Huber-White procedure to correct for heteroscedastic errors (implemented via the robust standard error procedure in Stata).[1] Additional variations in the statistical modeling included clustering the standard errors at the zip code level. These models provided similar results, so only the non-clustered results are presented.

A second specification is modeled where γ is one of the two dichotomous indicators related to the respondent's interest in homeownership classes and counseling. One dichotomous variable indicates whether the respondent's interest in taking a workshop or getting counseling before purchasing a home increased during the past year, and the other dichotomous variable indicates whether or not the respondent is willing to pay at least $1 for homebuyer classes and/or counseling. The independent variables in this specification are similar to those included in Eq. 1, with the addition of two subjective measures: renters' self-reported knowledge of mortgages and interest rates, and their perceptions of the difficulty of qualifying for a mortgage. Both of these measures would be endogenous if included in Eq. 1, but knowledge levels and the perceived ease of obtaining financing have an explanatory role in renters' interest in and take-up of homebuyer counseling and education programs. This specification is illustrated in Eq. 2 below:

$$\text{Eq. 2} \quad \gamma^{i} = \alpha + \beta 1\mathbf{AGE}^{\mathbf{i}} + \beta 2\mathbf{MIN}^{\mathbf{i}} + \beta 3\mathbf{TIME}^{\mathbf{i}} + \beta 4\mathbf{INCOME}^{\mathbf{i}} + \beta 5\mathbf{MISSED}^{\mathbf{i}} + \beta 6\mathbf{HHSIZE}^{\mathbf{i}} + \beta 7\mathbf{ESL}^{\mathbf{i}} + \beta 8\mathbf{HORATE}^{\mathbf{i,z}} + \beta 9\mathbf{LNINC}^{\mathbf{i,z}} + \beta 10\mathbf{CHGVAL}^{\mathbf{i,z}} + \beta 11\mathbf{FRATE}^{\mathbf{i,z}} + \beta 12\mathbf{KNOW}^{\mathbf{i}} + \beta 13\mathbf{EASE}^{\mathbf{i}} + \epsilon^{\mathbf{i}}$$

In both Eq. 1 and Eq. 2, the coefficients β1 through β7 indicate the direction and significance of demographic factors that may influence perceptions of homeownership,

[1] OLS assumes randomly distributed error terms. Survey data typically have heteroskedastic standard errors. The Huber-White procedure estimates the asymptotic covariance matrix of the estimates under the hypothesis of heteroscedasticity. The standard errors presented are adjusted for specified correlations of error terms across observations.

intentions to try to purchase a home, and interest in counseling and education. The coefficients β8 to β11 provide insight into how zip code level factors affect the outcomes. Of particular interest are β10 and β11, which measure price changes and contemporaneous foreclosure rates at the zip code level.

The independent variables were selected because they might affect renters' perceptions of homeownership, their intentions to purchase a home, and/or their interest in homeownership counseling and education. Beginning with the variables that control for demographic characteristics, each respondent's age (AGE**)** is recoded 1 for ages <35, 2 for ages 36-45, 3 for ages 46-55, and 4 for ages 56+. The mean age based on these categories is 2.4. Age is controlled for because homeownership is generally more likely for older households. A related control variable is the amount of time (TIME) the respondent has lived in his or her rental unit. The amount of time is recoded 1 for <1year, 2 for 1-3 years, 3 for 4-5 years, 4 for 6-10 years, and 5 for more than 10 years. Based on these categories, the mean amount of time renters had spent in their rental units was 3.07. Longer tenure in one's rental unit suggests more permanent housing and a lower likelihood that the renter will seek to own a home compared to renters who made recent housing transitions. A binary variable indicates whether the respondent is of a minority race/ethnicity (MIN), which includes Hispanic/Latino respondents. Thirty-six percent of respondents were of a non-White race/ethnicity. Race/ethnicity is included because homeownership is less likely among racial and ethnic minority groups, even after controlling for income and other factors. A related variable indicates whether English is the primary language spoken in the respondent's home, which is suggestive of immigrant status and perhaps familiarity with mortgage and housing markets. Ninety-six percent of respondents primarily speak English at home. A variable for the respondent's household size (HHSIZE) is included and

represents the total number of people who live in the renter's household. Household size is included to control for household type and the respondent's demand for owner-occupied housing and related amenities. The mean household size was 2.4.

Two control variables serve as proxy measures of respondents' financial capacity to purchase a home. One of these variables is a binary variable that indicates whether the respondent missed a rent payment or paid a late fee on rent during the past two years (MISSED), which is a probabilistic measure of the likelihood that the renter has reduced credit quality and would therefore be a subprime borrower in the mortgage market. Seven percent of respondents reported missing a rent payment or paying a late fee. The other proxy measure of renters' capacity to purchase a home is their income level (INCOME), which is coded categorically 1 to 8 (1 = less than $12,000, 2= $12,000 - $24,000; 3=$24,001-$36,000; 4=$36,001-$48,000; 5=$48,001-60,000; 6=$60,001-$72,000; 7=$72,001-$84,000; 8= more than $84,000). The mean income level was 3.4, which falls in the range of $40,000 - $50,000, though this is an estimate based on the categories.

As noted above, the specification in Eq. 2 includes two additional control variables that were excluded from Eq. 1 because they would have been endogenous. One of these variables is the respondent's perception of the ease of qualifying for a mortgage (EASE), which is coded categorically, ranging from 1 "very easy," to 4 "very hard." The mean response was 1.9, suggesting that respondents were relatively confident about the ease of qualifying for a mortgage. The other variable added in Eq. 2 is the respondent's self-reported knowledge of mortgages and interest rates (KNOW). Self-reported knowledge was indicated on a 5-point scale, ranging from 1 "nothing" to 5 "a lot," with a mean of 3.4.

Results

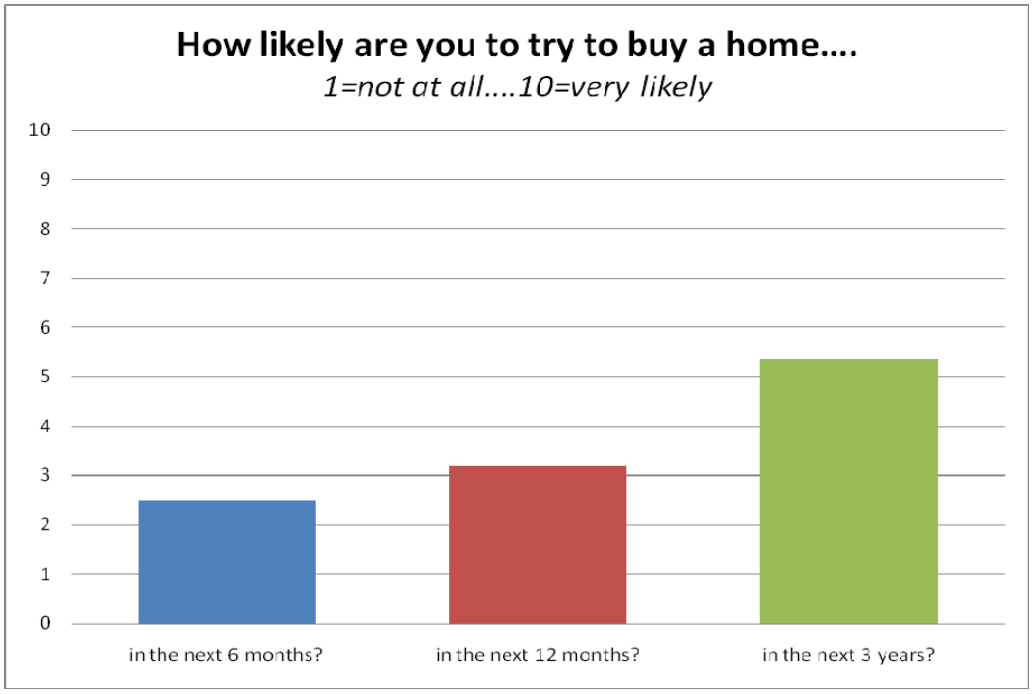
Table 3 displays the results for the eight regressions related to renters' intent to purchase a home and their perceptions of the risks and benefits of homeownership. Beginning with renters' intent to purchase a home, Figure 2 indicates that the mean intent to purchase a home increases as the time period is extended from six to 36 months. Personal income is the only individual characteristic that is a statistically significant predictor of renters' intent to purchase a home across all three time periods. As expected, income is positively associated with intent to purchase a home. The variable indicating that English is the primary language in the renters' home is positive and large in magnitude in the models for intent to purchase a home in six and 12 months, but not in 36 months. In the 36 month period, age and household size are statistically significant in the expected directions. Age is negatively associated with intent to purchase a home in 36 months, and household size is positively associated with intent to purchase a home in this timeframe. Turning to zip code level factors, homeownership rate is negatively associated with renters' intent to purchase a home within six and 12 months, which is contrary to the earlier prediction. One explanation for this unexpected finding is that renters who live in areas with more single family homes, as well as renters who live in more desirable areas, may be less interested in buying a home and moving in the short run. The coefficients for zip code level foreclosure rates and housing prices are not statistically significant; therefore, the findings for two coefficients do not accord with Hypothesis 1 concerning renters' intent to buy a home.

Table 3: OLS Regression Results: Coefficients and t-statistics, San Francisco Bay Area Default Perceptions Survey Conducted August 14-18, 2008

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
VARIABLES	Likely to try to buy a home in 6 months	Likely to try to buy a home in 12 months	Likely to try to buy a home in 36 months	Out of 1,000 people who buy a home this year, how many will be able to sell it for more than they paid for it	Out of 1,000 people who buy a home this year, how many will lose their home to foreclosure within 12 years	Scale of benefits of ownership exceed scale of Risks	How likely to recommend that a friend purchase a home in present neighborhood	How easy do you think it would be to receive a mortgage if you applied for a loan?
Age	-0.084	-0.230	-0.709***	-11.149	-39.299***	-0.023	-0.012	-0.026
	(0.146)	(0.165)	(0.185)	(18.693)	(14.917)	(0.025)	(0.056)	(0.043)
Minority	0.322	0.403	0.463	-104.217**	55.157*	-0.118**	-0.081	0.024
	(0.351)	(0.377)	(0.400)	(40.587)	(31.557)	(0.052)	(0.115)	(0.096)
Time in home	-0.020	-0.085	-0.165	-11.363	26.275**	-0.034*	-0.013	-0.054
	(0.105)	(0.121)	(0.141)	(15.303)	(12.289)	(0.019)	(0.045)	(0.035)
Income level	0.134*	0.263***	0.306***	13.871	-25.556***	0.056***	0.083***	0.136***
	(0.080)	(0.087)	(0.085)	(9.045)	(7.082)	(0.012)	(0.028)	(0.024)
Missed rent last 2 years	-0.723*	-0.706	-0.746	-71.970	19.763	-0.036	-0.220	-0.545***
	(0.398)	(0.510)	(0.786)	(79.646)	(60.054)	(0.098)	(0.205)	(0.130)
Household size	0.080	0.147	0.255*	-12.681	-5.606	-0.030	-0.033	-0.060*
	(0.100)	(0.126)	(0.146)	(14.864)	(10.849)	(0.019)	(0.041)	(0.032)
English primary language at home	1.284*	1.170*	-0.324	-133.086**	-46.915	-0.115	0.326*	0.431**
	(0.662)	(0.698)	(0.618)	(56.119)	(63.536)	(0.089)	(0.180)	(0.188)
Zip % owner 2000	-0.020**	-0.019*	-0.013	-0.055	-1.122	-0.001	0.004	-0.000
	(0.010)	(0.011)	(0.011)	(1.138)	(0.962)	(0.002)	(0.003)	(0.003)
Zip Log Income 2006	0.460	-0.039	-0.063	-34.404	38.903	0.056	-0.030	0.270
	(0.470)	(0.541)	(0.564)	(60.079)	(60.720)	(0.085)	(0.176)	(0.186)
Zip change home values	-0.034	-0.010	0.002	-1.572	-0.519	-0.001	-0.010	-0.010
	(0.022)	(0.023)	(0.025)	(2.770)	(2.192)	(0.004)	(0.008)	(0.007)
Zip foreclosure rate	-0.039	-0.029	0.097	-17.278**	11.054*	0.011	-0.044*	-0.014
	(0.057)	(0.065)	(0.068)	(7.391)	(6.561)	(0.010)	(0.022)	(0.022)
Constant	-2.623	3.771	6.440	936.851	16.215		2.693	-1.449
	(5.271)	(6.078)	(6.550)	(687.263)	(686.964)		(2.011)	(2.112)
Observations	359	359	359	336	346	359	359	359
R-squared	0.059	0.094	0.164	0.065	0.087	0.0672	0.058	0.171

Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

Figure 2



There are several interesting results related to the perceived likelihood that homebuyers will be able to sell their home for more than they paid and that people who buy a home will lose their home to foreclosure within 12 years. Beginning with the likelihood that homebuyers will be able to sell their home for more than the purchase price, minority respondents are much less likely to expect that homebuyers will be able to sell their homes for more than they paid (-104/1,000, or a 25% marginal effect relative to the overall mean). Likewise, respondents who primarily speak English at home are more pessimistic that homebuyers will be able to sell their homes for more than the purchase price (-133/1,000, or a 33% marginal effect). The effect of each of these variables is sizeable, as both are about one-third of a standard deviation in magnitude. The impact of foreclosures at the zip code level on the perceived likelihood of selling a home for more than the purchase price is also statistically significant in the direction predicted. The magnitude of the effect of the zip code foreclosure rate is relatively small (-17/1,000).

However, the coefficient for the zip code foreclosure rate is cumulative. For example, the coefficient indicates that renters who live in a zip code with a 10% foreclosure rate predict that 170 fewer homebuyers (out of 1,000) will be able to sell their homes for more then they paid, relative to the predictions of renters who reside in zip codes with no foreclosures. In contrast to the statistical significance of the zip code foreclosure rate, the coefficients for zip code level homeownership rate, log income, and changes in home values are not statistically significant in the model of the perceived likelihood of selling a home for more than the homebuyer paid.

Regarding respondents' expectations of the number of homebuyers who will lose their homes to foreclosure within 10 years, four individual characteristics are statistically significant: age is negatively associated with the perceived likelihood of foreclosure, minority race is positively associated with the perceived likelihood of foreclosure (55/1,000, or a 16% marginal effect relative to the mean), time in one's home is positively associated with the perceived likelihood of foreclosure, and personal income is negatively associated with it (as income rises, the subjective prediction of foreclosure is reduced 25/1,000 for each income level). The negative association between age and the expected rate of foreclosure may indicate that greater experience levels lead to lower risk perceptions. The incidence of foreclosure is the only statistically significant zip code level variable related to the perceived likelihood of foreclosure. Higher foreclosure rates are associated with increases in the perceived likelihood that homebuyers will lose their homes to foreclosure within 12 years. The size of this effect is small (11/1,000 with a 3.2% effect for each one percentage point increase in the zip code's foreclosure rate relative to the mean), but again the predicted impact of a neighborhood's foreclosure rate is cumulative. These findings are generally consistent with Hypothesis 1 and suggest that lower-income renters, minority renters, and renters who live in areas with higher foreclosure rates are more pessimistic

about the likelihood of foreclosure within 12 years of purchasing a home. Higher income levels are related to lower expectations of foreclosure, which may be expected given the greater financial security that often comes with a higher income. However, the coefficient for income at the zip code level is not statistically significant.

Table 3 displays the results concerning the likelihood renters would recommend that a friend purchase a home in the renter's current neighborhood, the likelihood that a scale of four benefits of homeownership exceeds a scale of fours risks of homeownership, and the ease of obtaining a mortgage. In terms of individual characteristics, recommending that a friend purchase a home in the renter's neighborhood was positively associated with personal income and primarily speaking English at home. Both of these associations corresponded with the original hypotheses. At the zip code level, only foreclosure rate was related to the likelihood that renters would recommend purchasing a home in their neighborhood. Renters in zip codes with higher foreclosure rates are less likely to recommend buying a home in their current neighborhoods. Turning to the scale that compares the risks and benefits of homeownership, only three factors are statistically significant, each of which was an individual characteristic. Personal income is associated with a higher likelihood of reporting that the benefits of homeownership exceed the risks. In contrast, minority status and time in one's housing unit are associated with a higher likelihood of reporting that the risks of homeownership are greater than the benefits. Each of these three associations corresponds with the original predictions. The perceived ease of qualifying for a mortgage is positively associated with higher personal income and primarily speaking English at home. Missing a rental payment is negatively associated with the perceived ease of obtaining a mortgage, with an effect greater than one standard deviation. None of the zip code level variables are associated with the perceived ease of obtaining a mortgage.

Table 4: Demand for Counseling: Probit Coefficients and t-statistics, San Francisco Bay Area Default Perceptions Survey Conducted August 14-18 2008

VARIABLES	(1) Has interest increased in last year?	(2) Willing to pay for counseling
Age	0.000	0.008
	(0.026)	(0.026)
Minority	0.012	0.047
	(0.053)	(0.055)
Time in home	0.002	-0.002
	(0.020)	(0.020)
Income level	0.010	0.041***
	(0.014)	(0.014)
Missed rent last 2 years	-0.046	0.112
	(0.104)	(0.099)
Household size	-0.014	0.011
	(0.019)	(0.020)
English primary language at home	0.027	0.051
	(0.102)	(0.105)
Zip % owner 2000	0.003**	-0.002
	(0.001)	(0.002)
Zip Log Income 2006	-0.043	-0.029
	(0.085)	(0.088)
Zip change home values	0.001	0.003
	(0.004)	(0.004)
Zip foreclosure rate	-0.008	-0.000
	(0.010)	(0.011)
Self report Knowledge	-0.043	0.032
	(0.026)	(0.027)
Self Report ease of getting a mortgage	0.036	0.003
	(0.030)	(0.031)
Observations	359	359
Model chi-square	12.40	15.60
df	13	13
R2	0.0274	0.0321
N of observations	359	359

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 4 displays the results for the two variables related to renters' perceptions of housing counseling and education: the change in the renter's interest in counseling during the past year and the renter's willingness to pay for counseling prior to purchasing a home. Renter's willingness to pay is recoded into a binary variable that indicates whether or not the renter is willing to pay any amount ($1 or more) for counseling. Increased interest in counseling is only

associated with living in a zip code with a higher homeownership rate. This finding may suggest that renters in areas with higher homeownership rates aspire to own a home like their neighbors and are looking for assistance to help them navigate the process. However, the estimated coefficient is quite small in magnitude. Renters' willingness to pay for counseling is only related to personal income. As respondents' income levels increase, they are more likely to be willing to pay at least $1 for counseling.

Discussion and analysis

The results suggest that renters generally remain optimistic about trying to buy a home, especially within three years. Relatively higher levels of foreclosure in a zip code are associated with lower expected benefits and greater expected risks of homeownership, even after controlling for observed respondent characteristics and other zip code factors. The more frequent the incidence of foreclosure is in a neighborhood, the more negative the individual's perceptions. In addition, areas with higher foreclosure rates are less likely to be recommended as places to buy a home. One particularly interesting result is that individuals likely overestimate the risks of foreclosure. Despite the housing downturn, historic data indicates that even the riskiest groups of mortgage borrowers are unlikely to lose their home to foreclosure at the mean predicted rate of 33%. However, these surveys were conducted relatively soon after the media's intense attention on subprime foreclosures, and as a result, they may not provide an indication of renter perceptions of the risks of homeownership during preceding periods.

In general, individual characteristics were somewhat predictive of expectations of and attitudes towards homeownership. Higher income levels were significant in several models, as individuals with higher incomes generally had lower risk perceptions and associated homeownership with higher net expected benefits. The negative association between income and

individuals' risk perceptions of homeownership is likely due to the link between higher income levels and the perceived ease of qualifying for a mortgage. Individuals with higher incomes are less likely to obtain subprime mortgage products, thus reducing their exposure to the risks associated with these types of loans.

There is no evidence that renters have responded to the housing downturn with increased interest in homebuyer counseling. Given that interest in financial counseling is influenced by an individual's time preferences, patience, and willingness to invest in the future (Meier and Sprenger 2008), it is logical that market conditions would not lead to an increased interest in homebuyer counseling. Interestingly, individuals with higher income levels are more willing to pay for counseling, but their interest in housing counseling did not increase during the past twelve months than individuals with lower incomes; this could indicate that these individuals recognize the importance of homebuyer counseling but are not motivated to change their behavior.

Policy implications

Renters remain fairly optimistic about owning a home, particularly in the longer term, suggesting that additional policy initiatives aimed at increasing demand among first-time homebuyers may be less important. For example, Congress extended the homebuyer tax credit through April 30, 2010, but further efforts to spur demand among first-time homebuyers may be unnecessary. The likelihood of purchasing a home, in both the short and the long term, is significantly impacted by income, suggesting that increasing affordability over the life of the mortgage should be an important policy goal. This study also demonstrates that neighborhoods with higher concentrations of foreclosures are less in demand. Policies such as the Neighborhood Stabilization Program (NSP) are important for increasing the demand for homes and preventing

further disinvestment in areas impacted by foreclosure. Additional NSP-type strategies may be important tools for restoring demand in neighborhoods that were severely impacted by the foreclosure crisis. A key question remains whether affordable areas that attract first-time homebuyers are able to stabilize and recover as fast as higher-cost neighborhoods, or if the current crisis has set off a downward spiral of disinvestment.

This study also demonstrates that individuals do not predict risk very well, and in fact are overly pessimistic about homeownership, yet they are still generally inclined to purchase a home in the future. This suggests that efforts are needed to better educate potential homebuyers about the true risks and benefits associated with homeownership. Current market conditions, including changes in home values or foreclosure rates, appear to have no effect on changes in the demand for homebuyer counseling. Thus, efforts to increase the take-up of homebuyer counseling should not assume that the housing crisis alone, or other market conditions, will automatically motivate individuals to seek counseling.

Conclusion

This study utilizes a unique dataset that captures renter perceptions of homeownership in the midst of the worst housing crisis in recent history. The survey focused on a sample of low-to-moderate income renters in the San Francisco Bay Area. This geographic area was heavily impacted by the boom and bust cycle of the current housing crisis, but to a much more moderate degree than the more extreme cases of Las Vegas or Miami. The survey instrument measured a number of important variables including estimations of homeownership risk and renters' intent to purchase a home, which could then be modeled against zip code specific factors including foreclosure rates and changes in home values.

The findings show that foreclosure rates and changes in home values at the zip code level do not appear to significantly impact renters' intent to purchase a home in the future. While interest in purchasing a home in the near term (six months to one year) is low, respondents indicated stronger interest in purchasing a home within the next three years. Not surprisingly, a higher incidence of foreclosure at the zip code level is associated with a more pessimistic view of the risks of homeownership. Additionally, renters' expectations of the likelihood of foreclosure are negatively related to age, positively related to minority race, and negatively associated with income level. There is no evidence that the housing crisis is leading to an increased interest in homebuyer counseling, suggesting that financial educators cannot assume that homebuyers will automatically become more motivated to seek counseling as a result of the crisis.

While these findings are timely and instructive for policymakers, community developers, and financial educators, interpretation of this analysis requires some caution. The survey provides a snapshot of renter sentiment at one point in time in one urban area, and as a result, may not be generalizable to broader populations. Additionally, the survey responses provide indications of individuals' intentions but not of their actual behavior. Future research that measures the actual purchase decisions of current renters living in neighborhoods heavily impacted by the foreclosure crisis would provide further insight.

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Appendix: Questions used as Dependent Variables from the HomeownershipSF Survey

Question 6. On a 10 to 1 scale, where 10 is "very likely" and 1 is "not at all likely", how likely are you to try to buy a home in the next...
6 months? _____
12 months? _____
3 years? _____

Question 11. If you were asked by a friend today, how likely would you be to recommend buying a home in your current neighborhood:
[ ] Not at all likely
[ ] Not very likely
[ ] Somewhat likely
[ ] Very likely

Question 15. How much do you worry about each of the following issues related to owning a home?

	Major worry	Moderate worry	Small worry	Not a worry at all
Paying too much for a house	[]	[]	[]	[]
Qualifying for an affordable mortgage	[]	[]	[]	[]
Keeping up with repairs and maintenance	[]	[]	[]	[]
Not being able to keep up with payments	[]	[]	[]	[]

Question 16. How much do you consider each of the following issues to be a benefit of owning a home?

	Large benefit	Moderate benefit	Small benefit	Not a benefit at all
Gives you more control over your housing	[]	[]	[]	[]
Value can increase over time	[]	[]	[]	[]
Personal pride/sense of achievement	[]	[]	[]	[]
Stabilizes your housing costs	[]	[]	[]	[]

Question 18. How hard or easy do you think it would it be for you to qualify for a mortgage?
[] Very hard
[] Somewhat hard
[] Somewhat easy
[] Very easy

Question 21. How much would you be willing to pay for homebuyer classes and/or counseling?
I would never go to a class or counselor
[] $0
[] $1-$25
[] $25-$50
[] $50-$75
[] $75-$100
[] $100-$200
[] More than $200

Question 22. Compared to a year ago, would you say your interest in taking a workshop or getting counseling before buying a home has increased, decreased or is about the same?
[] Increased
[] Decreased
[] About the same
[] Not sure
[] I will never buy a home

Question 31. Out of 1000 people who buy a home this year, how many will be able to sell the home for more than they paid for it?
(Enter any number in the blank box at the end, from 0 to 1000, where 0 means "no one" and 1000 means "everyone")

Question 32. Out of 1000 people who buy a home this year, how many will lose their home to foreclosure within 12 years?
(Enter a number below where 0= "no one" and 1000 = "everyone"